

DEPARTMENT OF DEFENSE
IN-HOUSE RDT&E ACTIVITIES

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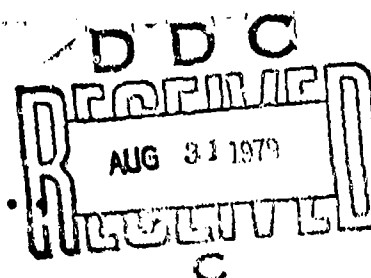
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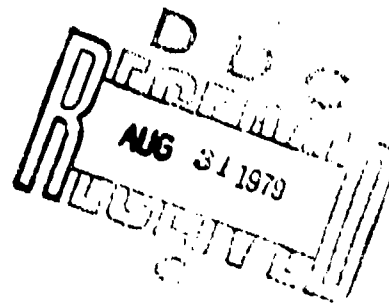
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DEPARTMENT OF DEFENSE IN-HOUSE RDT&E ACTIVITIES

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HAROLD F. DAVIDSON



30 October 1978

Prepared for:

US ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND ✓
5001 Eisenhower Avenue
Alexandria, Virginia 22333

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FOREWORD

THIS REPORT WAS PREPARED FOR THE US ARMY MATERIEL DEVELOPMENT AND READINESS COMMAND AT THE DIRECTION OF THE CHIEF, RESEARCH, DEVELOPMENT AND ACQUISITION. THIS EDITION IS THE TWELFTH OF A SERIES THAT WAS INITIATED IN 1966.

EACH IN-HOUSE RDT&E ACTIVITY OF THE DEPARTMENT OF DEFENSE IS DESCRIBED ON ONE PAGE IN THIS COMPILATION. THE DATA FOR 1978 ARE SUMMARIZED IN TABLES PRECEDING THE MAIN TEXT AND CHARTS AND TABLES ARE PROVIDED FOR EACH SERVICE SHOWING ORGANIZATIONAL RELATIONSHIPS AND COMMAND CHAINS.

ALL CURRENT DOD RDT&E ACTIVITIES WHICH MEET THE REPORT REQUIREMENT OF HAVING AT LEAST 25 PER CENT OF THEIR BUDGET IN RDT&E FUNDS ARE LISTED IN THE CONTENTS ALPHABETICALLY WITHIN EACH DEPARTMENT. SOME T&E FACILITIES WHICH DO NOT MEET THE REQUIREMENT PREVIOUSLY NOTED ARE ALSO LISTED BY SPECIAL REQUEST. ORGANIZATIONAL CHANGES DURING FY 1978 APPEAR IN APPENDIX I.

DOD INSTRUCTION 7700.9 WHICH HAS BEEN THE BASIS FOR THIS REPORT SINCE ITS INCEPTION HAS BEEN REPLACED BY A TRI-SERVICE REGULATION, AR 70-63, NAVCOMPTIST 7044.5D, AFR 80-26, ENTITLED DOD IN-HOUSE RDT&E ANNUAL ACTIVITIES REPORT, 1 NOVEMBER 1978. APPENDIX II CONTAINS MANY OF THE DEFINITIONS USED IN THIS REPORT AND ARE PROVIDED AS AN ADDITIONAL AID IN USE OF THE REPORT. APPENDIX III LISTS SELECTED ABBREVIATIONS AND ACRONYMS. APPENDIX IV LISTS SELECTED KEY WORDS WITH PAGE REFERENCES.

EVERY EFFORT HAS BEEN MADE TO PROVIDE ACCURATE INFORMATION, PARTICULARLY FISCAL DATA. ALL NUMBERS AND STATEMENTS HAVE BEEN THOROUGHLY EXAMINED AND IN ALMOST ALL CASES, REVIEWED WITH THE SUBMITTING AGENCY TO INSURE CORRECTNESS AND CLARITY.

SINCERE APPRECIATION IS EXTENDED TO MRS. EVELYN HUGHES AND HER ASSOCIATES OF THE US ARMY MANAGEMENT SYSTEMS SUPPORT AGENCY (USAMSSA) FOR THEIR EFFORTS AND ASSISTANCE IN PROVIDING A COMPUTER PRINTOUT FROM WHICH THIS REPORT IS PRINTED. SINCERE APPRECIATION IS ALSO EXTENDED TO MRS. JEANETTE MERRITT FOR HER KIND ASSISTANCE, AND TO MR. EUGENE GROSECLOSE OF USAMSSA FOR HIS TECHNICAL TROUBLE SHOOTING WHICH MADE A COMPUTER PRINTOUT POSSIBLE.

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SUMMARY
DEPARTMENT OF DEFENSE IN-HOUSE ROT&E FACILITIES
PROGRAM DATA FOR FY 1978

TOTAL ANNUAL PROGRAM	(MILLIONS)
TOTAL INHOUSE PROGRAM	6586.770
TOTAL ROT&E PROGRAM	3111.415
TOTAL INHOUSE ROT&E	3634.697
TOTAL ANNUAL OPERATING COST	2031.345
	823.883

PERSONNEL DATA (END OF FY 1978)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD	TOTAL PROFESSIONALS
MILITARY	23678	725	6039
CIVILIAN	64724	3398	27604
TOTAL	88403	4123	33643

PHYSICAL FACILITIES (END OF FY 1978)

ACRES	9194364
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SPACE (THOUSANDS OF SQ FT)

LABORATORY	29347.486
ADMINISTRATIVE	8937.379
OTHER	57464.532
TOTAL	95749.397

COST (MILLIONS)

REAL PROPERTY	4503.165
EQUIPMENT	3822.542
TOTAL	8325.707

TABLE 1. ARMY POTEE ACTIVITIES: PROGRAM AND PERSONNEL DATA, FY 1978

INSTALLATION	FUNDING DATA (MILLIONS \$)				PERSONNEL DATA									
	TOTAL	IMMOUSE	POTEE	TOTAL	TOTAL	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV	POTEE
AFRIMEDICAL RESEARCH LABORATORY	6,369	4,105	3,268	2,004	69	117	87	71	7	6	26	26	26	11
AIR OFFENSE BOARD	6,971	2,872	2,872	2,872	117	87	87	87	0	0	0	0	0	11
AIRBORNE BOARD	3,406	3,406	3,406	3,406	217	217	217	217	0	0	0	0	0	12
AIRCRAFT DEVELOPMENT TEST ACTIVITY	10,229	6,206	6,206	6,206	232	232	232	232	0	0	0	0	0	12
ARMOR AND ENGINEER BOARD	9,435	9,435	9,435	9,435	412	412	412	412	0	0	0	0	0	13
ATMOSPHERIC SCIENCES LABORATORY	17,102	9,324	16,805	5,067	70	70	70	70	0	0	0	0	0	13
AVIATION BOARD	2,922	2,922	2,922	2,922	1,374	1,374	1,374	1,374	0	0	0	0	0	13
AVIATION ENGINEERING FLIGHT ACTIVITY	5,278	5,278	5,278	5,278	64	64	64	64	0	0	0	0	0	13
AVIATION RESEARCH & TECHNOLOGY LABORATORIES	35,467	17,001	34,105	16,351	24	24	24	24	0	0	0	0	0	13
AVIONICS & D ACTIVITY	17,347	9,409	10,756	5,771	12	12	12	12	0	0	0	0	0	13
BALLISTIC RESEARCH LABORATORY	49,192	30,635	45,382	28,230	26	26	26	26	0	0	0	0	0	13
CHEMICAL SYSTEMS LABORATORY	73,619	45,235	48,272	35,738	125	125	125	125	30	30	30	30	30	13
COLD REGIONS RES LABORATORY	7,659	5,763	5,022	3,545	14	14	14	14	0	0	0	0	0	13
COLD REGIONS TEST CENTER	8,216	8,216	8,216	8,216	242	242	242	242	0	0	0	0	0	13
COMBAT SURVEILLANCE & TGT ACQUISITION LAB	65,817	7,982	15,077	4,008	10	10	10	10	0	0	0	0	0	13
COMMUNICATIONS - ELECTRONICS BOARD	0,388	0,388	0,388	0,388	42	42	42	42	0	0	0	0	0	13
COMMUNICATIONS & D COMMAND	41,029	7,119	35,205	6,434	10	10	10	10	0	0	0	0	0	13
CONSTRUCTION ENGINEERING RESEARCH LAB	9,165	7,553	6,040	5,505	3	3	3	3	0	0	0	0	0	13
CURRAY PROVING GROUND	24,883	23,197	18,082	17,539	163	163	163	163	1	1	1	1	1	13
ELECTRONIC PROVING GROUND	17,602	15,465	7,865	6,435	585	585	585	585	0	0	0	0	0	13
ELECTRONIC WARFARE LABORATORY	95,852	22,427	34,973	16,710	48	48	48	48	1	1	1	1	1	13
ELECTRONICS & D TECH SUPPORT ACTIVITY	6,085	6,085	5,248	5,248	6	6	6	6	0	0	0	0	0	13
ELECTRONICS TECHNOLOGY AND DEVICES LAB	20,731	13,250	20,645	13,164	0	0	0	0	0	0	0	0	0	13
ENGINEER TOPOGRAPHIC LABORATORIES	26,405	10,363	24,344	8,904	16	16	16	16	0	0	0	0	0	13
ENGINEER WATERWAYS EXPERIMENT STATION	55,795	44,454	14,504	12,767	37	37	37	37	2	2	2	2	2	13
FIRE ARTILLERY BRGAD	3,446	3,446	1,054	1,054	153	153	153	153	0	0	0	0	0	13
FIRE CONTROL & SMALL CAL. WPNS SVSTE LAB	45,719	28,983	21,952	11,264	15	15	15	15	0	0	0	0	0	13
HARRY DIAMOND LABORATORIES	176,770	41,250	69,028	30,348	6	6	6	6	2	2	2	2	2	13
HUMAN ENGINEERING LABORATORY	8,554	7,923	7,772	6,249	72	72	72	72	1	1	1	1	1	13
INFANTRY BOARD	3,748	3,748	1,590	1,590	124	124	124	124	0	0	0	0	0	13
INSTITUTE OF DENTAL RESEARCH	3,375	2,363	2,017	1,057	63	63	63	63	2	2	2	2	2	13
INSTITUTE OF SURGICAL RESEARCH	4,116	4,116	2,008	2,008	134	134	134	134	0	0	0	0	0	13
INTELLIGENCE & SECURITY BOARD	1,209	0,399	1,091	7,381	100	100	100	100	0	0	0	0	0	13
IRVING CALIFOR WEAPONS SYSTEMS LAB	92,649	5,429	95,221	4,403	27	27	27	27	0	0	0	0	0	13
JAWALEIN MISSILE RANGE, WASH. ISLANDS	178,038	92,289	97,359	41,810	28	28	28	28	0	0	0	0	0	13
LETTERMAN ARMY INSTITUTE OF RESEARCH	34,327	21,903	22,368	6,368	153	153	153	153	0	0	0	0	0	13
MATERIALS AND MECHANICS RESEARCH CENTER	19,180	12,525	15,491	9,574	17	17	17	17	0	0	0	0	0	13
MATERIEL SYSTEMS ANALYSIS ACTIVITY	48,762	47,784	31,081	30,364	28	28	28	28	0	0	0	0	0	13
MATERIEL TESTING DIPLOMATE	26,052	26,052	24,307	24,307	58	58	58	58	0	0	0	0	0	13
MEDICAL RESEARCH INST OF INFECTIOUS DISEASES	14,412	11,812	10,771	8,171	208	208	208	208	0	0	0	0	0	13
MEDICAL RESEARCH INST OF INFECTIOUS DISEASES	14,412	11,812	10,771	8,171	208	208	208	208	0	0	0	0	0	13
MISSILE RESEARCH & DEV. CMD	97,540	67,495	57,745	38,858	26	26	26	26	0	0	0	0	0	13
MORILLITY EQUIP & D COMMAND	150,692	45,429	55,028	27,348	76	76	76	76	0	0	0	0	0	13
NIGHT VISION & ELECTRO OPTICS LABORATORY	91,499	20,984	33,705	14,748	27	27	27	27	0	0	0	0	0	13
RESEARCH INST FOR BEHAVIORAL & SOCIAL SCI	24,237	11,533	23,502	10,798	36	36	36	36	0	0	0	0	0	13
RESEARCH INSTITUTE OF ENVIRONMENTAL MEDICINE	5,205	5,205	3,906	3,906	84	84	84	84	0	0	0	0	0	13
SIGNALS WARFARE LABORATORY	60,670	4,089	26,559	3,447	66	66	66	66	0	0	0	0	0	13
TANK-AUTO & D COMMAND	137,723	16,039	15,977	7,781	14	14	14	14	0	0	0	0	0	13
TROPIC TEST CENTER	44,502	30,124	36,048	21,600	466	466	466	466	0	0	0	0	0	13
WALTER REED ARMY INSTITUTE OF RESEARCH	139,163	131,939	123,322	122,037	930	930	930	930	4	4	4	4	4	13
WHITE SANDS MISSILE RANGE	30,500	30,500	24,245	24,245	378	378	378	378	1	1	1	1	1	13
YUMA PROVING GROUND	207,893	105,664	122,310	712,909	646	646	646	646	327	327	327	327	327	13
TOTALS	207,893	105,664	122,310	712,909	646	646	646	646	327	327	327	327	327	13

TABLE 2. ARMY ROTEC FACILITIES DATA, FY 1978

INSTALLATION	SPACE AND PROPERTY				COST (MILLIONS \$)	
	ACRES	LABORATORY	ADMIN	OTHER	REAL PROPERTY	EQUIPMENT
APOMEDICAL RESEARCH LABORATORY	10	52,747	7,797	21,884	0.844	7,725
AIP DEFENSE BOARD	26	36,550	36,326	30,114	1.895	9,700
AIRCRAFT DEVELOPMENT TEST ACTIVITY	27	3,978	3,914	3,390	0.971	3,451
ARMOF AND ENGINEER BOARD	1196	0.000	30,124	118,026	1,782	26,051
ATMOSPHERIC SCIENCES LABORATORY	6900	6,200	54,455	151,508	1,419	2,411
AVIATION BOARD	45	61,354	81,245	17,255	18,000	23,080
AVIATION ENGINEERING FLIGHT ACTIVITY	1	0.000	30,003	12,961	0.170	3,043
AVIATION ENGINEERING & TECHNOLOGY LABORATORIES	13	9,200	16,000	124,800	3,632	7,417
AVIONICS R & D ACTIVITY	127	88,448	58,473	16,370	1,431	4,211
BALLISTIC RESEARCH LABORATORY	1020	539,702	11,200	40,092	0.000	7,852
CHEMICAL SYSTEMS LABORATORY	1750	435,000	235,000	790,000	14,545	26,598
COLD REGIONS RCE LABORATORY	24	80,786	30,927	128,544	7,894	6,959
COLD REGIONS TEST CENTER	647155	2,715	20,457	268,622	12,196	5,762
COMBAT SURVEILLANCE & TGT ACQUISITION LAB	227	88,475	6,139	12,568	4,266	17,115
COMMUNICATIONS - ELECTRONICS BOARD	7	0.000	18,260	3,663	0.123	0.000
COMMUNICATIONS R & D COMMAND	0	69,943	4,291	0.000	0.000	10,800
CONSTRUCTION ENGINEERING RESEARCH LAB	30	76,081	34,156	0.000	3,896	4,067
DUGWAY PROVING GROUND	802731	90,728	191,558	1620,246	79,999	28,762
ELECTRONIC PROVING GROUND	59573	0.000	50,300	189,500	2,350	99,400
ELECTRONIC WARFARE LABORATORY	0	142,936	13,617	48,402	0.000	86,420
ELECTRONICS R & D TECH SUPPORT ACTIVITY	136	17,876	34,509	77,415	33,988	6,821
ELECTRONICS TECHNOLOGY AND DEVICES LAB	0	95,789	10,575	26,474	0.000	10,880
ENGINEER TOPOGRAPHIC LABORATORIES	33	90,722	7,000	13,300	6,000	10,600
ENGINEER WATERWAYS EXPERIMENT STATION	722	1736,714	359,816	172,430	20,240	34,127
FIELD ARTILLERY BOARD	23	22,566	32,802	17,640	3,330	0.842
FIRE CONTROL & SMALL CAL. WPNS SYSTS LAB	0	0.000	0.000	0.000	0.000	0.000
HARRY DIAMOND LABORATORIES	2343	405,382	70,732	272,541	47,544	39,768
HUMAN ENGINEERING LABORATORY	12	22,000	25,800	23,000	4,412	3,806
INFANTRY BOARD	10	0.000	35,653	51,089	0.900	0.779
INSTITUTE OF DENTAL RESEARCH	1	26,524	5,696	6,730	0.853	1,130
INSTITUTE OF SURGICAL RESEARCH	4	0.000	1,800	22,408	2,013	1,908
INTELLIGENCE & SECURITY BOARD	10	0.000	5,000	23,000	0.250	0.749
KNAJALEIN MISSILE RANGE, MARSHALL ISLANDS	1491	0.000	155,647	2280,823	592,832	140,161
LARGE CALIBER WEAPONS SYSTEMS LAB	4000	204,685	184,072	128,700	8,596	60,600
LITTERMAN ARMY INSTITUTE OF RESEARCH	45	133,198	50,506	346,309	42,552	10,478
MATERIALS AND MECHANICS RESEARCH CENTER	45	349,000	56,000	187,000	16,591	16,150
MATERIEL SYSTEMS ANALYSIS ACTIVITY	4	8,140	99,818	1,715	2,070	0,767
MATERIEL TESTING DIRECTORATE	22845	728,692	4,351	249,509	15,188	44,167
MEDICAL ENGINEERING PED LABORATORY	5	45,888	27,500	34,068	3,216	3,293
MEDICAL R & D COMMAND	0	0.000	23,300	0.000	0.000	0,144
MEDICAL RSCH INST OF INFECTIOUS DISEASES	43	60,854	19,820	209,699	17,824	4,774
MISSILE PSCH & DEV. CMD.	11000	663,993	318,702	428,008	130,372	88,367
MORBILITY EQUIP R & D COMMAND	1064	750,849	146,730	709,870	58,523	31,770
NIGHT VISION & ELECTRO OPTICS LABORATORY	2913	552,557	65,900	417,994	27,050	18,366
RESEARCH INST FOR BEHAVIORAL & SOCIAL SCI	38	180,639	27,186	20,000	32,000	50,000
RSCH INSTITUTE OF ENVIRONMENTAL MEDICINE	0	46,110	2,859	6,190	0.000	1,725
SIGNALS WARFARE LABORATORY	4	60,421	18,563	28,647	3,713	3,426
TANK-AUTC R & D COMMAND	11	46,000	8,000	36,000	0.309	3,772
TROPIC TEST CENTER	17500	17,710	41,400	8,891	38,294	125,000
WALTER REED ARMY INSTITUTE OF RESEARCH	203	182,974	58,260	0.000	1,086	1,906
WHITE SANDS MISSILE RANGE	4214377	122,826	440,747	3020,680	183,676	199,573
YUMA PROVING GROUND	870309	0.832	112,690	1294,613	47,288	76,584
TOTALS	6670947	10083,678	3544,246	13201,707	1534,783	1402,717

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TABLE 3. NAVY ROTEE ACTIVITIES, PROGRAM AND PERSONNEL DATA, FY 1978

INSTALLATION	FUNDING DATA (MILLIONS \$)				PERSONNEL DATA										
	TOTAL	IMHOUSE	OUTICE	IMHOUSE	TOTAL	MIL	CIV	TOTAL	PMD	MIL	CIV	PPOF	MIL	CIV	PROF
AFROSPACE MEDICAL RESEACH LABORATORY	5.842	5.461	4.876	4.495	62	134	17	19	22	43					
AIR DEVELOPMENT CENTER	221.786	106.461	138.964	67.944	290	2172	6	28	76	1094					
AIR ENGINEERING CENTER	78.548	57.179	16.857	10.544	284	1893	0	3	34	442					
AIR PROPULSION CENTER	26.186	19.641	23.045	16.809	8	584	0	0	8	155					
AIR TEST CENTER	114.846	95.104	64.080	51.379	1455	2114	3	7	295	455					
APCIC RESEARCH LABORATORY	10.569	0.055	8.828	0.000	3	0	0	0	2	0					
ATLANTIC FLEET WEAPONS TRAINING FACILITY	14.907	3.402	0.286	0.156	160	34	0	0	27	34					
BIOSCIENCES LABAPATORY	3.110	0.889	2.164	0.556	12	6	1	0	6	0					
BLCCD RESEARCH LABORATORY	1.043	1.063	0.887	0.887	10	9	3	0	3	2					
CIVIL ENGINEERING LABORATORY	29.208	11.790	20.853	9.606	16	300	1	27	8	160					
CLOTHING & TEXTILE RESEACH FACILITY	1.879	1.519	0.758	0.758	1	96	0	1	1	37					
COASTAL SYSTEMS CENTER	41.452	22.578	28.925	14.603	113	641	1	21	8	275					
DAVID W. TAYLOR SHIP RCD CENTER	145.069	115.636	99.867	78.958	77	2570	0	125	22	1202					
DENTAL RESEACH INSTITUTE, NYC	1.141	1.141	0.593	0.593	28	16	3	3	10	7					
ENVIRONMENTAL PROTECTION RESEACH FACILITY	3.131	1.409	2.918	1.196	14	41	0	7	6	30					
EXPLOSIVE ORDNANCE DISPOSAL FACILITY	8.902	5.569	4.667	2.592	50	165	0	2	6	45					
HEALTH RESEACH CENTER	2.970	2.565	2.378	1.973	35	86	8	10	10	31					
MEDICAL RESEACH INSTITUTE	14.051	13.308	10.597	9.854	251	241	63	39	86	83					
MEDICAL RESEACH UNIT NO.2	2.559	2.430	1.864	1.864	31	5	9	2	12	3					
MEDICAL RESEACH UNIT NO.3	2.305	2.256	1.807	1.758	27	61	5	3	10	36					
NATIONAL PARACHUTE TEST RANGE	14.617	14.168	7.817	7.777	243	268	1	0	19	25					
OCEAN R & D ACTIVITY	24.057	11.900	22.620	11.032	10	230	1	35	10	133					
OCEAN SYSTEMS CENTER	208.015	104.998	135.895	75.274	321	2493	1	165	132	1239					
ORDNANCE MISSILE TEST FACILITY	4.912	3.111	2.935	1.595	96	54	1	0	34	4					
PACIFIC MISSILE TEST CENTER	213.903	134.819	79.186	55.430	1061	3890	3	9	270	1204					
PERSONNEL RESEACH & DEVELOPMENT CENTER	19.798	9.022	14.092	6.860	24	265	1	78	9	195					
RESEACH LABORATORY	207.252	161.382	178.272	132.402	146	3357	0	585	32	1554					
SUPMARINE MEDICAL RESEACH LABORATORY	2.346	2.346	1.797	1.797	32	69	7	11	12	32					
SURFACE WEAPONS CENTER	269.991	134.317	165.652	87.614	125	4763	2	239	44	1938					
UNDERSEA RANGES DEPARTMENT	25.001	18.059	14.422	17.188	44	36	0	1	11	26					
UNDERWATER SYSTEMS CENTER	258.330	125.988	97.118	48.898	100	2806	1	100	34	1455					
WEAPONS CENTER	249.833	132.774	145.745	86.486	513	3969	0	127	39	1387					
WEAPONS EVALUATION FACILITY	7.521	7.282	2.406	2.406	143	111	1	2	25	56					
TOTALS	2235.2131329	6051307.171	811.284		5737	33449	139	1649	1325	13380					

TABLE 4. NAVY ROTEE FACILITIES DATA, FY 1978

INSTALLATION	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLIONS \$)	
	ACRES	LABORATORY	ADMIN	OTHER	PEAL	PROPERTY EQUIPMENT
AEROSPACE MEDICAL RESEARCH LABORATORY	6	167.657	8.800	11.690	3.130	3.583
ATF DEVELOPMENT CENTER	831	825.432	82.081	654.549	32.958	41.758
AIR ENGINEERING CENTER	7377	467.945	204.247	2144.793	46.255	20.413
AIR PROPULSION CENTER	68	376.704	37.073	211.766	50.820	11.093
AIR TEST CENTER	6638	15.125	362.400	4540.589	159.868	22.489
ARCTIC RESEARCH LABORATORY	4973	45.706	15.987	341.075	39.000	0.000
ATLANTIC FLEET WEAPONS TRAINING FACILITY	3602	0.000	14.957	154.005	10.717	92.007
BIOSCIENCES LABORATORY	5	77.625	8.731	34.646	1.000	5.400
BLOOD RESEARCH LABORATORY	1	14.720	7.460	8.300	0.500	1.216
CIVIL ENGINEERING LABORATORY	30	117.980	27.061	44.181	2.000	2.393
CLOTHING & TEXTILE RESEARCH FACILITY	1	10.000	7.000	3.000	0.440	0.850
COASTAL SYSTEMS CENTER	682	345.947	38.140	247.830	31.358	16.559
DAVID W. TAYLOR SHIP RCD CENTER	325	1420.730	176.879	287.109	71.007	52.625
DENTAL RESEARCH INSTITUTE, NTC	C	22.025	4.815	13.355	0.000	0.647
ENVIRONMENTAL PREDICTION RESEARCH FACILITY	0	1.362	4.558	10.594	0.000	0.883
EXPLOSIVE ORDNANCE DISPOSAL FACILITY	1087	34.681	16.934	49.085	3.952	2.339
HEALTH RESEARCH CENTER	1	11.177	4.500	0.000	1.880	0.491
MEDICAL RESEARCH INSTITUTE	4	145.868	9.400	40.299	3.887	1.479
MEDICAL RESEARCH UNIT NO.2	20	32.882	16.075	48.364	0.101	0.804
MEDICAL RESEARCH UNIT NO.3	5	41.068	8.942	25.729	1.074	0.711
NATIONAL PARACHUTE TEST RANGE	484608	6.400	56.670	1142.407	33.061	20.519
OCEAN P & O ACTIVITY	5	27.454	18.633	17.749	9.000	3.200
OCEAN SYSTEMS CENTER	3837	1300.727	213.808	193.555	36.549	122.829
ORDNANCE MISSILE TEST FACILITY	88	108.566	30.539	78.694	5.404	9.988
PACIFIC MISSILE TEST CENTER	27084	912.309	395.680	3514.572	142.415	140.762
PERSONNEL RESEARCH & DEVELOPMENT CENTER	1	56.500	7.040	0.000	0.387	2.176
RESEARCH LABORATORY	798	2321.146	192.496	491.794	91.892	88.917
SUBMARINE MEDICAL RESEARCH LABORATORY	1	40.514	14.099	0.000	1.105	1.769
SURFACE WEAPONS CENTER	5381	1672.370	153.791	971.785	93.726	86.152
UNDERSEA RANGES DEPARTMENT	1042	70.603	17.339	306.012	23.899	1.282
UNDERWATER SYSTEMS CENTER	359	999.660	105.446	560.578	46.111	45.073
WEAPONS CENTER	1094228	1385.564	429.128	4545.132	226.424	94.860
WEAPONS EVALUATION FACILITY	7	C.400	53.592	94.926	9.600	0.926
TOTALS	1643095	13776.857	2607.789	20800.823	1225.520	897.093

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TABLE 5. AIR FORCE ROTEE ACTIVITIES, PROGRAM AND PERSONNEL DATA, FY 1978

INSTALLATION	FUNDING DATA (MILLIONS \$)				PERSONNEL DATA									
	TOTAL INHOUSE	ROTEE	INHOUSE	ROTEE	TOTAL MIL	TOTAL CIV	PH-D MIL	PH-D CIV	PROF MIL	PROF CIV				
AERO PROPULSION LABORATORY	77.222	14.053	76.102	12.933	51	382	8	24	43	208				
ARMAMENT DEVELOPMENT AND TEST CENTER	792.386	138.381	259.915	93.642	4367	1225	21	35	440	438				
ARNOLD ENGINEERING DEVELOPMENT CENTER	109.302	104.629	104.069	102.741	85	121	5	4	50	44				
AVIONICS LABORATORY	135.604	26.759	132.364	23.519	171	742	10	41	100	464				
ENGINEERING SERV CNTR DET1 (CEE001)	6.865	2.080	5.268	0.488	66	12	7	2	43	4				
FLIGHT DYNAMICS LABORATORY	146.512	105.604	85.675	61.447	2992	1626	0	2	128	213				
FLIGHT TEST CENTER	1.345	1.279	0.775	0.709	23	9	15	1	20	5				
FRANK J SETTLER RESEARCH LABORATORY	55.510	25.317	46.400	21.334	120	505	7	73	41	308				
GEOPHYSICS LABORATORY	25.445	10.097	22.230	7.797	126	241	12	46	91	158				
HUMAN RESOURCES LABORATORY	92.864	16.075	50.730	14.955	57	362	9	73	49	288				
MATERIALS LABORATORY	38.784	12.556	36.222	10.317	176	260	2	13	71	91				
ROCKET PROPELLSION LABORATORY	220.780	29.573	125.977	22.059	232	1101	5	58	98	637				
SCHOOL OF AEROSPACE MEDICINE	18.675	16.103	13.160	10.285	388	280	60	35	108	101				
SPACE & MISSILE TEST CENTER (DET1)	156.620	43.317	0.000	0.000	98	330	0	2	51	95				
SPACE AND MISSILE TEST CENTER	72.690	17.712	52.267	10.255	266	351	4	6	209	150				
WEAPONS LABORATORY	149.190	58.601	136.953	26.619	645	480	51	36	380	240				
4950 TEST WING	41.384	41.087	39.367	39.070	863	1068	1	0	183	94				
6570 AEROSPACE MEDICAL RESEARCH LABORATORY	14.534	6.193	14.534	6.193	136	158	5	24	39	99				
6585TH TEST GROUP	19.451	11.715	12.039	7.553	325	290	3	3	75	85				
TOTALS	2264.158	722.330	1297.347	500.080	11387	10343	232	498	2335	4139				

TABLE 6. AIR FORCE ROTEE FACILITIES DATA, FY 1978

INSTALLATION	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLIONS \$)	
	ACRES	LABORATORY	ADMIN	OTHER	REAL PROPERTY	EQUIPMENT
AFC PROPULSION LABORATORY	40	229.400	41.784	105.665	20.850	18.108
ARMAMENT DEVELOPMENT AND TEST CENTER	464248	347.000	859.991	10713.693	286.308	221.438
ARNOLD ENGINEERING DEVELOPMENT CENTER	39081	1092.409	182.573	541.114	390.266	60.029
AVIONICS LABORATORY	220	248.800	8.775	411.403	23.618	68.003
ENGINEERING SERV CNTR DET1 (CEFDQ)	3	4.981	2.200	9.751	0.938	1.076
FLIGHT DYNAMICS LABORATORY	92	463.927	122.003	90.867	26.184	50.576
FLIGHT TEST CENTER	227071	106.575	285.404	6730.973	272.968	120.062
FRANK J SEILER RESEARCH LABORATORY	1	19.000	3.100	0.000	1.680	1.634
CROPHYSICS LABORATORY	368	391.903	15.006	25.893	9.717	21.453
HUMAN RESOURCES LABORATORY	13	69.595	48.264	61.429	5.447	31.647
MATERIALS LABORATORY	15	222.800	25.169	111.156	19.675	15.673
ROCKET PROPULSION LABORATORY	68345	419.046	86.848	4.780	125.000	23.482
ROME AIR DEVELOPMENT CENTER	1560	847.196	77.272	127.532	30.470	52.046
SCHOOL OF AEROSPACE MEDICINE	74	360.655	77.980	48.696	16.936	20.539
SPACE & MISSILE TEST CENTER (DET1)	16025	65.937	261.593	2573.930	280.742	328.672
SPACE AND MISSILE TEST CENTER	55586	91.407	334.384	431.954	94.520	70.670
WEAPONS LABORATORY	702	556.000	142.000	134.000	98.233	69.854
4950 TEST WING	227	0.000	68.320	973.152	11.966	277.290
4570 AEROSPACE MEDICAL RESEARCH LABORATORY	30	71.886	43.129	51.100	19.213	27.400
6585TH TEST GROUP	6602	336.000	7.000	148.000	10.220	38.928
	880312	5944.616	2672.795	23315.078	1734.951	1516.220
TOTALS						

TABLE 7. DEPARTMENT OF DEFENSE PDTEE ACTIVITIES, PROGRAM AND PERSONNEL DATA, FY 1979

INSTALLATION	FUNDING DATA (MILLIONS \$)				PERSONNEL DATA						
	TOTAL	TOTAL INHOUSE	TOTAL PDTEE	TOTAL PDTEE	TOTAL PDTEE	TOTAL PDTEE	TOTAL PDTEE	TOTAL PDTEE	TOTAL PDTEE	TOTAL PDTEE	TOTAL PDTEE
ARMED FORCES RADIOLOGICAL RESEARCH INSTITUTE	8.816	8.816	7.072	7.072	89	129	32	20	58	42	42
TOTALS	8.816	8.816	7.072	7.072	89	129	32	20	58	42	42

SUMMARY

DEPARTMENT OF DEFENSE IN-HOUSE R&D LABORATORIES

PROGRAM DATA FOR FY 1978

	(MILLIONS)
TOTAL ANNUAL LABORATORY PROGRAM	4187.495
TOTAL INHOUSE PROGRAM	2167.905
TOTAL RDT&F PROGRAM	2994.517
TOTAL INHOUSE RDT&F	1414.442
TOTAL ANNUAL OPERATING COST	561.915

PERSONNEL DATA (END OF FY 1978)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHD	TOTAL PROFESSIONALS
MILITARY	11905	664	7519
CIVILIAN	48186	3746	22903
TOTAL	60091	4410	26426

PHYSICAL FACILITIES (END OF FY 1978)

ACRES	1682220
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SPACE (THOUSANDS OF SQ FT)

LABORATORY	23790.675
ADMINISTRATIVE	5411.096
OTHER	26482.326
TOTAL	55684.097

COST (MILLIONS)

REAL PROPERTY	2042.590
EQUIPMENT	1965.910
TOTAL	4008.500

TABLE 1A. ARMY RED LABORATORIES, PROGRAM AND PERSONNEL DATA, FY 1978

INSTALLATION	FUNDING DATA (MILLIONS \$)	PERSONNEL DATA									
		TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL
		IMHOUSE	IMHOUSE	IMHOUSE	IMHOUSE	IMHOUSE	IMHOUSE	IMHOUSE	IMHOUSE	IMHOUSE	IMHOUSE
AEROMEDICAL RESEARCH LABORATORY	FT. PUCKER, AL.	4,369	4,105	3,268	3,004	69	71	7	6	26	28
ATMOSPHERIC SCIENCES LABORATORY	WHITE SANDS, N.M.	17,102	5,324	16,805	5,067	412	175	0	19	13	86
AVIATION RESEARCH & TECHNOLOGY LABORATORIES	MCFFERT FIELD, CA.	35,667	17,001	34,105	16,351	26	569	1	29	13	233
AVIONICS R & D ACTIVITY	FT. MONMOUTH, N.J.	17,347	9,408	10,756	5,771	12	154	0	5	7	139
BALLISTIC RESEARCH LABORATORY	ABERDEEN PROV. GR., MD.	49,193	30,635	48,382	28,230	26	524	2	102	15	372
CHEMICAL SYSTEMS LABORATORY	ABERDEEN PROV. GR., MD.	73,619	45,235	48,272	35,758	125	870	30	52	76	510
COLD REGIONS REC LABORATORY	WANDER, N.M.	7,659	5,763	5,022	3,545	14	263	1	31	5	128
COMBAT SURVEILLANCE & TGT ACQUISITION LAB	FT. MONMOUTH, N.J.	69,817	7,882	15,077	4,058	10	172	0	2	9	130
COMMUNICATIONS R & D COMMAND	FT. MONMOUTH, N.J.	41,029	7,119	35,205	6,494	10	353	0	10	3	234
CONSTRUCTION ENGINEERING RESEARCH LAB	CHAMPAIGN, IL.	9,165	7,553	6,040	5,505	3	204	0	30	3	128
ELECTRONIC WARFARE LABORATORY	FT. MONMOUTH, N.J.	96,662	22,427	34,973	16,710	59	412	1	8	6	224
ELECTRONICS TECHNOLOGY AND DEVICES LAB	FT. MONMOUTH, N.J.	20,731	13,250	20,645	13,164	0	280	0	32	0	171
ENGINEER TOPOGRAPHIC LABORATORIES	FT. BELVOIR, VA.	26,405	10,363	28,344	8,905	16	269	1	19	9	178
ENGINEER WATERWAYS EXPERIMENT STATION	VICKSBURG, MS.	55,785	44,484	14,504	12,797	37	1375	2	79	31	465
PIPE CONTROL & SMALL CAL. WPNS SYST LAB	DOVER, N.J.	45,719	28,983	21,952	11,264	15	608	0	20	13	347
HARRY DIAMOND LABORATORIES	WASHINGTON, D.C.	126,770	41,250	60,028	30,368	6	1194	2	58	5	803
HUMAN ENGINEERING LABORATORY	ABERDEEN PROV. GR., MD.	9,556	7,033	7,772	6,249	33	142	1	16	13	106
INSTITUTE OF DENTAL RESEARCH	WASHINGTON, D.C.	3,325	2,363	2,019	1,057	63	26	5	2	47	10
INSTITUTE OF SURGICAL RESEARCH	FT. SAM HOUSTON, TX.	4,116	4,116	2,008	2,008	134	80	16	6	19	19
LARGE CALIBER WEAPONS SYSTEMS LAB	DOVER, N.J.	178,034	92,289	93,359	41,810	28	1523	0	51	15	978
LETTERMAN ARMY INSTITUTE OF RESEARCH	PRESIDIO, S.F., CA.	9,665	9,665	6,368	6,368	153	106	28	21	137	86
MATERIALS AND MECHANICS RESEARCH CENTER	WATERLOO, MA.	34,327	21,993	22,348	14,584	17	604	1	64	8	197
MATERIALS ENGINEERING RED LABORATORY	FT. DETRICK, MD.	4,243	4,243	3,287	3,287	28	103	2	12	14	34
MEDICAL R & D COMMAND	FT. DETRICK, MD.	26,052	26,052	26,397	24,397	59	93	26	1	47	3
MEDICAL PSCH INST OF INFECTIOUS DISEASES	FT. DETRICK, MD.	14,412	11,812	10,771	8,171	308	197	53	24	104	67
MISSILE PSCH. & DEV. CMD.	REDSTONE ARSENAL, AL.	97,549	67,495	57,745	38,859	26	989	0	68	19	679
MOBILITY EQUIP R & D COMMAND	FT. BELVOIR, VA.	150,692	45,420	55,028	27,348	79	1204	1	20	25	318
NATICK RED COMMAND	NATICK, MA.	43,708	36,884	23,722	18,840	104	1098	5	76	27	422
NIGHT VISION & ELECTRIC OPTICS LABORATORY	FT. BELVOIR, VA.	91,498	20,984	33,705	14,748	27	521	0	36	8	244
PSCHAFON INST FOR BEHAVIORAL & SOCIAL SCI	WASHINGTON, D.C.	24,237	11,533	23,502	10,798	36	227	3	143	20	227
PSCH INSTITUTE OF ENVIRONMENTAL MEDICINE	NATICK, MA.	5,205	5,205	3,906	3,906	84	97	5	18	43	50
SIGNALS WARFARE LABORATORY	VINT HILL, VA.	60,670	4,089	36,553	2,467	69	162	0	5	14	57
TANK-AUTC R & D COMMAND	WARREN, MI.	137,723	16,039	19,877	7,781	14	271	1	7	13	157
WALTER DEER ARMY INSTITUTE OF RESEARCH	WASHINGTON, D.C.	44,592	30,124	36,069	21,600	466	445	123	58	438	211
TOTALS		1634,677	718,130	867,833	462,798	2566	15420	315	1130	1245	8043

TABLE 2A. ARMY REE FACILITIES DATA, CY 1978

INSTALLATION	SPACE AND PROPERTY				COST (MILLIONS \$)	
	ACRES	LABORATORY	ADMIN	OTHER	REAL	PROPERTY EQUIPMENT
AEROMEDICAL RESEARCH LABORATORY	10	52,747	7,797	21,924	0.844	7,725
ATMOSPHERIC SCIENCES LABORATORY	15	61,354	81,245	17,255	12,000	23,080
AVIATION RESEARCH & TECHNOLOGY LABORATORIES	127	82,848	58,673	16,370	1,431	4,211
AVIONICS R & D ACTIVITY	0	16,000	33,600	0,000	0,000	7,852
BALLISTIC RESEARCH LABORATORY	1920	539,702	11,200	40,982	14,595	26,598
CHEMICAL SYSTEMS LABORATORY	1750	435,000	235,000	740,000	27,890	17,000
CGIC REGIONS REE LABORATORY	24	20,786	30,027	128,544	7,894	6,959
COMBAT SURVEILLANCE & TGT ACQUISITION LAB	227	88,475	6,136	12,569	4,266	17,115
COMMUNICATIONS R & D COMMAND	0	69,943	4,291	0,000	0,000	10,800
CONSTRUCTION ENGINEERING RESEARCH LAB	30	76,081	34,159	0,000	3,896	4,067
ELECTRONIC WARFARE LABORATORY	0	142,936	13,617	54,502	0,000	86,420
ELECTRONICS TECHNOLOGY AND DEVICES LAB	0	95,789	10,575	26,474	0,000	10,880
ENGINEER TOPOGRAPHIC LABORATORIES	33	90,722	7,000	13,300	6,000	10,600
ENGINEER WATERWAYS EXPERIMENT STATION	722	1736,714	359,819	172,439	20,240	34,127
FIRE CONTROL & SMALL CAL. WPNS SVSTLS LAB	0	0,000	0,000	0,000	0,000	0,000
HARVEY DIAMOND LABORATORIES	2343	405,382	70,732	272,541	47,594	39,762
HUMAN ENGINEERING LABORATORY	12	22,060	25,800	79,000	4,412	3,806
INSTITUTE OF DENTAL RESEARCH	4	9,325	5,696	6,730	0,853	1,130
INSTITUTE OF SURGICAL RESEARCH	1	26,424	1,800	22,408	2,013	1,908
LARGE CALIBER WEAPONS SYSTEMS LAB	4000	204,585	184,072	128,700	2,586	60,600
LEFTERMAN ARMY INSTITUTE OF RESEARCH	9	133,108	26,526	305,309	42,582	10,472
MATERIALS AND MECHANICS RESEARCH CENTER	48	389,000	96,000	157,000	16,591	16,150
MEDICAL BIOENGINEERING REE LABORATORY	5	45,988	27,300	34,068	3,216	3,293
MEDICAL R & D COMMAND	0	0,000	23,300	0,000	0,000	0,146
MEDICAL RSCH INST OF INFECTIOUS DISEASES	43	90,954	19,820	209,699	17,824	4,775
MISSILE PSCH. & DEV. CMD.	11000	663,993	318,702	428,008	130,072	88,367
MOBILITY EQUIP R & D COMMAND	1064	750,849	146,730	209,979	58,523	31,770
NATICK REE COMMAND	2913	552,557	65,900	417,994	27,050	18,366
NIGHT VISION & ELECTRO OPTICS LABORATORY	38	180,639	27,186	20,000	32,000	50,000
RESEARCH INST FOR BEHAVIORAL & SOCIAL SCI	0	46,110	2,559	6,190	0,000	1,793
PSCH INSTITUTE OF ENVIRONMENTAL MEDICINE	4	60,421	18,563	28,647	3,713	2,426
SIGNALS WARFARE LABORATORY	1	46,000	0,000	38,000	0,309	3,772
TANK-AUTO R & D COMMAND	11	140,319	99,974	0,000	38,794	125,000
WALTER REED ARMY INSTITUTE OF RESEARCH	203	382,974	58,360	0,000	10,040	15,187
WASHINGTON, D.C.						
TOTALS	26597	7715,715	2130,042	3592,492	548,638	747,171

TABLE 3A. NAVY RED LABORATORIES, PROGRAM AND PERSONNEL DATA, FY 1978

INSTALLATION	FUNDING DATA (MILLIONS \$)				PERSONNEL DATA											
	TOTAL	INHOUSE	PODCE	RDYCE	TOTAL	CIV	MIL	PMC	MIL	CIV	PMC	MIL	CIV	PMC	PROF	CIV
AEROSPACE MEDICAL RESEARCH LABORATORY	5.842	5.461	4.876	4.495	68	134	17	19	22	43						
AIR DEVELOPMENT CENTER	221.786	106.461	138.964	67.944	290	2172	6	28	76	1094						
AIR ENGINEERING CENTER	78.548	57.179	16.857	10.544	284	1893	0	3	34	442						
ARCTIC RESEARCH LABORATORY	10.569	0.055	8.828	0.000	3	0	0	0	0	2						
BIOSCIENCES LABORATORY	3.110	0.869	2.164	0.556	18	6	1	0	6	0						
BLOOD RESEARCH LABORATORY	1.063	1.063	0.887	0.887	10	9	3	0	3	2						
CIVIL ENGINEERING LABORATORY	29.208	11.790	20.853	9.606	16	300	1	27	8	160						
CLOTHING & TEXTILE RESEARCH FACILITY	1.879	1.519	0.758	0.758	1	56	0	1	1	37						
COASTAL SYSTEMS CENTER	41.652	22.578	28.925	14.603	113	641	1	21	8	275						
DAVID W. TAYLOR SHIP RESEARCH CENTER	145.089	115.636	99.867	78.958	77	2570	0	125	22	1202						
DENTAL RESEARCH INSTITUTE, NTC	1.141	1.141	0.593	0.593	28	16	3	3	10	7						
ENVIRONMENTAL PREDICTION RESEARCH FACILITY	3.131	1.409	2.918	1.194	14	41	0	7	6	30						
HEALTH RESEARCH CENTER	2.970	2.565	2.378	1.973	35	86	8	10	10	31						
MEDICAL RESEARCH INSTITUTE	14.051	13.308	10.597	9.454	251	241	63	39	86	83						
MEDICAL RESEARCH UNIT NO.2	2.556	2.430	1.864	1.864	31	5	9	2	12	3						
MEDICAL RESEARCH UNIT NO.3	2.305	2.256	1.807	1.758	27	61	5	3	10	36						
OCEAN R & C ACTIVITY	24.057	11.900	27.620	11.032	10	230	1	35	10	133						
OCEAN SYSTEMS CENTER	208.015	104.998	135.695	75.274	321	2493	1	165	132	1239						
PERSONNEL RESEARCH & DEVELOPMENT CENTER	19.798	9.022	14.092	6.860	24	265	1	78	9	195						
RESEARCH LABORATORY	207.252	161.382	178.272	132.402	146	3357	0	585	32	1554						
SURFACINE MEDICAL RESEARCH LABORATORY	2.349	2.349	1.797	1.797	32	69	7	11	12	32						
SURFACE WEAPONS CENTER	269.991	134.317	165.652	87.614	125	4763	2	239	44	1936						
UNGERSEA PACGES DEPARTMENT	25.091	18.059	18.422	17.188	44	36	0	1	11	26						
UNDERWATER SYSTEMS CENTER	258.330	125.988	97.118	48.498	100	2806	1	100	34	1455						
WEAPONS CENTER	249.833	132.774	145.745	86.486	513	3969	0	127	39	1387						
TOTALS	1829.4191046	5091122.749	673.140		2581	26219	130	1620	630	11402						

TABLE 4A. NAVY RED FACILITIES DATA, BY 1978

INSTALLATION	SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLIONS \$)	
	ACRES	LABORATORY	ADMIN	OTHER	REAL PROPERTY	EQUIPMENT
AEROSPACE MEDICAL RESEARCH LABORATORY	6	167.657	8.870	11.690	3.130	3.583
AIP DEVELOPMENT CENTER	931	825.433	82.892	654.540	27.858	41.758
AIP ENGINEERING CENTER	7377	467.945	204.247	2144.783	96.255	70.413
ARCTIC RESEARCH LABORATORY	4972	45.706	15.987	341.078	35.000	0.000
BIOLOGICAL RESEARCH LABORATORY	6	75.625	8.731	34.640	1.000	2.400
BLOOD RESEARCH LABORATORY	1	14.720	7.340	8.300	0.500	1.216
CIVIL ENGINEERING LABORATORY	30	117.980	27.061	46.181	2.000	2.193
CLOTHING & TEXTILE RESEARCH FACILITY	1	10.000	7.000	3.000	0.440	0.850
COASTAL SYSTEMS CENTER	692	345.947	38.150	247.630	31.358	16.559
DAVID M. TAYLOR SHIP RED CENTER	325	1620.739	126.879	287.109	71.007	52.125
DENTAL RESEARCH INSTITUTE, NTC	0	22.025	4.815	13.355	0.000	0.647
ENVIRONMENTAL PROTECTION RESEARCH FACILITY	0	1.342	4.858	10.594	0.000	0.883
HEALTH RESEARCH CENTER	1	11.177	4.500	0.000	1.880	0.491
MEDICAL RESEARCH INSTITUTE	4	145.868	9.400	40.299	3.887	1.479
MEDICAL RESEARCH UNIT NO.2	20	32.882	16.075	48.364	0.101	0.804
MEDICAL RESEARCH UNIT NO.3	5	41.068	8.942	25.729	1.074	0.711
OCEAN R & D ACTIVITY	5	27.454	18.633	17.749	9.000	3.700
OCEAN SYSTEMS CENTER	3837	1300.727	213.808	183.555	36.549	122.829
PERSONNEL RESEARCH & DEVELOPMENT CENTER	1	56.500	7.000	0.000	0.387	2.176
RESEARCH LABORATORY	798	2321.146	192.496	491.794	91.892	88.917
SUBMARINE MEDICAL RESEARCH LABORATORY	1	40.514	14.059	0.000	1.105	1.769
SURFACE WEAPONS CENTER	5381	1672.370	153.731	971.755	93.726	86.152
UNDERSEA RANGES DEPARTMENT	1042	70.603	17.339	306.012	23.809	1.782
UNDERWATER SYSTEMS CENTER	350	999.660	105.446	566.578	46.111	45.073
WEAPONS CENTER	1094228	1195.564	429.128	4585.132	226.424	94.860
TOTALS	1119413	11822.472	1727.533	10993.679	800.683	596.070

TABLE 5A. AIR FORCE FED LABORATORY, PROGRAM AND PERSONNEL DATA, FY 1978

INSTALLATION	FUNDING DATA (MILLIONS \$)				PERSONNEL DATA									
	TOTAL		TOTAL INHOUSE		TOTAL		TOTAL		TOTAL		TOTAL		TOTAL	
	INHOUSE	RTCE	RTCE	RTCE	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV	MIL	CIV
AERO PROPULSION LABORATORY	77.222	14.053	76.102	12.933	51	382	8	24	43	208	438	208	438	208
ARMAMENT DEVELOPMENT AND TEST CENTER	792.386	168.381	259.916	93.642	4367	1225	21	35	440	458	458	458	458	458
AVIONICS LABORATORY	135.604	26.759	132.364	23.519	171	782	10	41	100	46	46	46	46	46
ENGINEERING SEPV CNTS DETI (CEEDC)	6.865	2.080	5.268	0.488	66	12	7	2	43	4	43	4	43	4
FLIGHT DYNAMICS LABORATORY	82.894	31.202	83.290	27.764	200	750	7	26	106	443	443	443	443	443
FRANK J SEILER RESEARCH LABORATORY	1.345	1.279	0.775	0.709	23	9	15	1	20	5	20	5	20	5
GEOPHYSICS LABORATORY	55.510	25.317	46.400	21.334	120	505	7	73	41	308	308	308	308	308
HUMAN RESOURCES LABORATORY	25.445	10.097	22.230	7.797	126	241	12	46	91	158	158	158	158	158
MATERIALS LABORATORY	92.865	16.075	50.739	14.955	57	362	9	73	49	288	288	288	288	288
POCKET PRODUCTION LABORATORY	38.784	12.556	36.222	10.317	174	260	2	13	71	91	91	91	91	91
PCME AIR DEVELOPMENT CENTER	220.780	29.573	125.977	22.059	232	1101	60	35	108	101	101	101	101	101
SCHOOL OF AEROSPACE MEDICINE	18.075	16.100	13.160	10.285	388	290	60	35	380	240	240	240	240	240
WEAPONS LABORATORY	149.190	38.801	136.953	26.619	645	490	51	36	380	99	99	99	99	99
657C AEROSPACE MEDICAL RESEARCH LABORATORY	14.534	6.193	14.534	6.193	136	158	5	24	39	3458	3458	3458	3458	3458
TOTALS	1718.399	398.264	1003.930	278.614	6758	6547	219	487	1629	3458	3458	3458	3458	3458

TABLE 6A. AIR FORCE R&D FACILITIES DATA, FY 1978

INSTALLATION	SPACE AND PROPERTY				COST (MILLIONS \$)
	ACRES	LABORATORY	ADMIN	OTHER	
AERO PROPULSION LABORATORY	40	229,490	41,744	105,665	20,850
ARMAMENT DEVELOPMENT AND TEST CENTER	464,249	347,000	959,991	107,133,693	18,108
ATONICS LABORATORY	220	248,800	8,775	411,403	286,308
ENGINEERING SERV CNTR DFTI (CEEDO)	3	4,951	2,200	9,751	23,613
FLIGHT DYNAMICS LABORATORY	92	463,927	122,003	90,467	68,003
FRANK J. SEILER RESEARCH LABORATORY	1	19,000	3,100	0,000	0,938
GEOPHYSICS LABORATORY	363	391,903	15,006	25,883	26,184
HUMAN RESOURCES LABORATORY	13	69,595	49,264	61,429	50,516
MATERIALS LABORATORY	15	222,409	25,169	111,156	1,634
ROCKET PROPULSION LABORATORY	6,345	419,046	86,448	4,780	9,717
ROME AIR DEVELOPMENT CENTER	1560	847,196	77,272	127,532	5,447
SCHOOL OF AEROSPACE MEDICINE	74	360,655	77,980	48,696	19,675
WEAPONS LABORATORY	702	556,000	142,000	134,000	125,000
6570 AEROSPACE MEDICAL RESEARCH LABORATORY	30	71,886	43,129	51,100	30,470
TOTALS	535720	4252,289	1553,521	11895,955	52,043
					16,936
					98,233
					19,213
					69,854
					27,400
					622,669

TABLE 7A. DEPARTMENT OF DEFENSE ROTEF FACILITIES DATA, FY 1978

INSTALLATION	ACRES	SPACE AND PROPERTY			COST (MILLIONS \$)
		SPACE (THOUSANDS OF SQUARE FEET)	ADMIN	OTHER	
ARMED FORCES RADIOELECTRONIC PSYCH. INSTITUTE BETHESDA, MD.	10	42.335	21.049	56.834	7.911
	10	42.335	21.049	56.834	7.911
TOTALS					4.512

TABLE 8 - ARMY RESEARCH AND DEVELOPMENT LABORATORY ORGANIZATIONAL RELATIONSHIPS

COMMAND CHAIN		
	INTERMEDIATE	COMMAND
AEROMEDICAL RESEARCH LABORATORY	MEDICAL R&D COMMAND	THE SURGEON GENERAL
ATMOSPHERIC SCIENCES LABORATORY	ELECTRONICS R&D CMD	MAT DEV & READ CMD
AVIATION R&I LABORATORY	AVIATION R&D COMMAND	MAT DEV & READ CMD
AVIONICS R&D ACTIVITY	AVIATION R&D COMMAND	MAT DEV & READ CMD
BALLISTIC RESEARCH LABORATORY	ARMAMENT R&D COMMAND	MAT DEV & READ CMD
CHEMICAL SYSTEMS LABORATORY	ARMAMENT R&D COMMAND	MAT DEV & READ CMD
COLD REGIONS R&E LABORATORY	--	CHIEF OF ENGINEERS
COMBAT SURVEILLANCE & TARGET ACQUISITION LAB	ELECTRONICS R&D COMMAND	MAT DEV & READ CMD
COMMUNICATIONS R&D COMMAND	--	MAT DEV & READ CMD
CONSTRUCTION ENGINEERING RSCH LABORATORY	--	CHIEF OF ENGINEERS
ELECTRONIC WARFARE LABORATORY	ELECTRONICS R&D COMMAND	MAT DEV & READ CMD
ELECTRONICS TECHNOLOGY & DEVICES LABORATORY	ELECTRONICS R&D COMMAND	MAT DEV & READ CMD
ENGINEER TOPOGRAPHIC LABORATORIES	--	CHIEF OF ENGINEERS
ENGINEER WATERWAYS EXPERIMENT STATION	--	CHIEF OF ENGINEERS
FIRE CONTROL & SMALL CALIBER WPNS SYSTEMS LAB	ARMAMENT R&D COMMAND	MAT DEV & READ CMD
HARRY DIAMOND LABORATORIES	ELECTRONICS R&D COMMAND	MAT DEV & READ CMD
HUMAN ENGINEERING LABORATORY	--	MAT DEV & READ CMD
INSTITUTE OF DENTAL RESEARCH	MEDICAL R&D COMMAND	THE SURGEON GENERAL
INSTITUTE OF SURGICAL RESEARCH	MEDICAL R&D COMMAND	THE SURGEON GENERAL
LARGE CALIBER WEAPONS SYSTEMS LABORATORY	ARMAMENT R&D COMMAND	MAT DEV & READ CMD
LETTERMAN ARMY INSTITUTE OF RESEARCH	MEDICAL R&D COMMAND	THE SURGEON GENERAL
MATERIALS AND MECHANICS RESEARCH CENTER	--	MAT DEV & READ CMD
MEDICAL BIOENGINEERING R&D LABORATORY	MEDICAL R&D COMMAND	THE SURGEON GENERAL
MEDICAL R&D COMMAND	--	THE SURGEON GENERAL
MEDICAL RESEARCH INST OF INFECTIOUS DISEASES	MEDICAL R&D COMMAND	THE SURGEON GENERAL
MISSILE R&D COMMAND	--	MAT DEV & READ CMD
MOBILITY EQUIPMENT R&D COMMAND	--	MAT DEV & READ CMD
NATICK R&D COMMAND	--	MAT DEV & READ CMD
NIGHT VISION & ELECTRO-OPTICS LABORATORY	ELECTRONICS R&D COMMAND	MAT DEV & READ CMD

Table 8 - ARMY RESEARCH AND DEVELOPMENT LABORATORY ORGANIZATIONAL RELATIONSHIPS

	<u>COMMAND CHAIN</u>	
	<u>INTERMEDIATE</u>	<u>COMMAND</u>
RES INST FOR BEHAVIORAL & SOCIAL SCIENCES	—	DEPUTY CHIEF OF STAFF FOR PERSONNEL
RESEARCH INSTITUTE OF ENVIRONMENTAL MEDICINE	MEDICAL R&D COMMAND	THE SURGEON GENERAL
SIGNALS WARFARE LABORATORY	ELECTRONICS R&D CMD	MAT DEV & READ CMD
TANK-AUTOMOTIVE R&D COMMAND	—	MAT DEV & READ CMD
WALTER REED ARMY INSTITUTE OF RESEARCH	MEDICAL R&D COMMAND	THE SURGEON GENERAL

TABLE 9 - NAVY RESEARCH AND DEVELOPMENT LABORATORY ORGANIZATIONAL RELATIONSHIPS

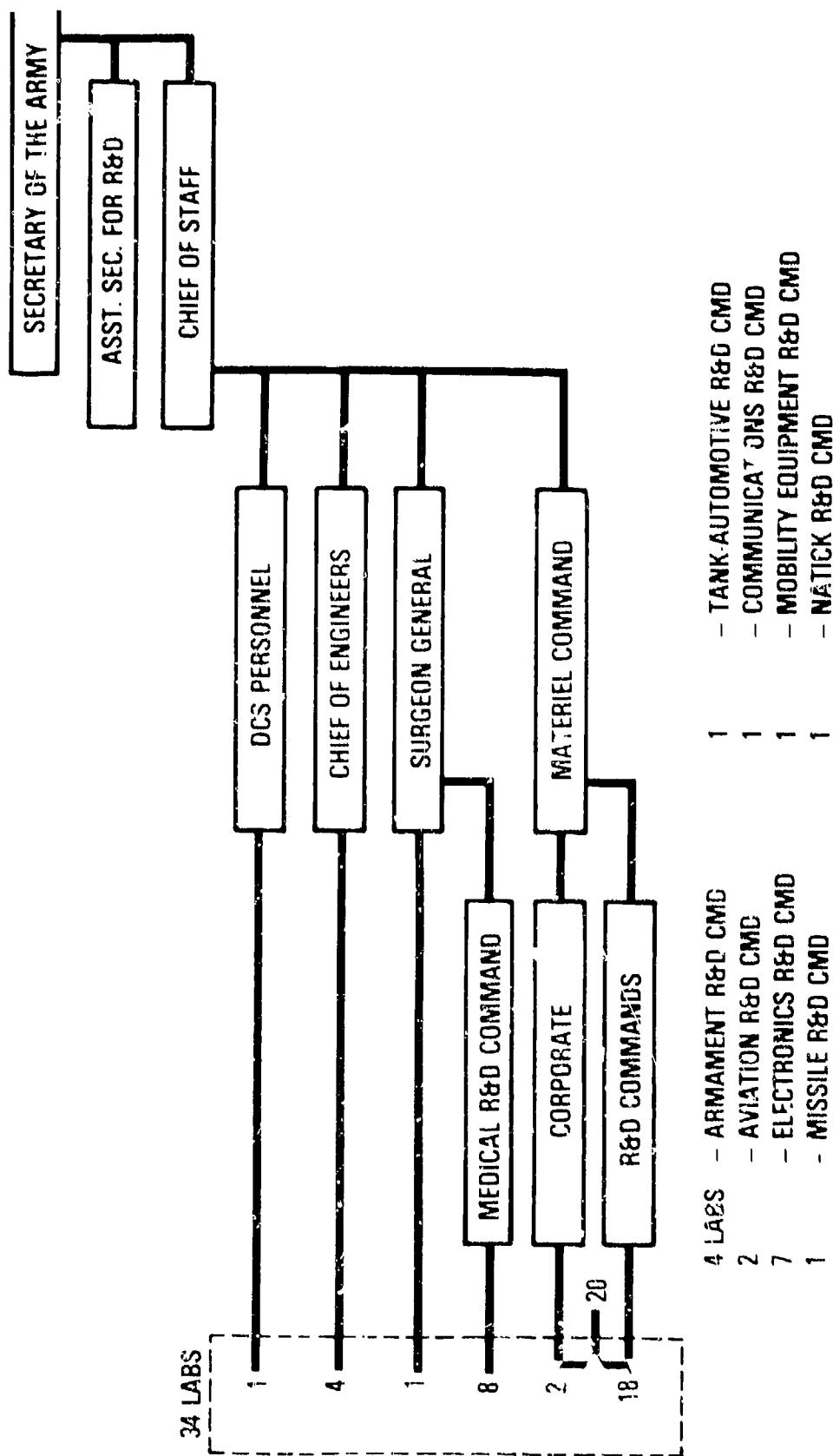
COMMAND CHAIN		
	INTERMEDIATE	COMMAND
AEROSPACE MEDICAL RESEARCH LABORATORY	MEDICAL R&D COMMAND	CHIEF, BUR OF MED/SUR
AIR DEVELOPMENT CENTER	—	CHIEF OF NAVAL MATERIAL
AIR ENGINEERING CENTER	AIR SYSTEMS COMMAND	CHIEF OF NAVAL MATERIAL
ARCTIC RESEARCH LABORATORY	—	CHIEF OF NAVAL RESEARCH
BIOSCIENCES LABORATORY	—	CHIEF OF NAVAL RESEARCH
BLOGD RESEARCH LABORATORY	MEDICAL R&D COMMAND	CHIEF, BUR OF MED/SUR
CIVIL ENGINEERING LABORATORY	FAC ENG COMMAND	CHIEF OF NAVAL MATERIAL
CLOTHING AND TEXTILE RESEARCH FACILITY	SUPPLY SYS COMMAND	CHIEF OF NAVAL MATERIAL
COASTAL SYSTEMS CENTER	—	CHIEF OF NAVAL MATERIAL
DAVID W. TAYLOR SHIP R&D CENTER	—	CHIEF, BUR OF MED/SUR
DENTAL RESEARCH INSTITUTE, NTC	MEDICAL R&D COMMAND	CHIEF OF NAVAL MATERIAL
ENVIRONMENTAL PREDICTION RESEARCH FACILITY	AIR SYSTEMS COMMAND	CHIEF, BUR OF MED/SUR
HEALTH RESEARCH CENTER	MEDICAL R&D COMMAND	CHIEF, BUR OF MED/SUR
MEDICAL RESEARCH INSTITUTE	MEDICAL R&D COMMAND	CHIEF, BUR OF MED/SUR
MEDICAL RESEARCH UNIT NO. 2	MEDICAL R&D COMMAND	CHIEF, BUR OF MED/SUR
MEDICAL RESEARCH UNIT NO. 3	MEDICAL R&D COMMAND	CHIEF, BUR OF MED/SUR
OCEAN R&D ACTIVITY	—	CHIEF OF NAVAL RESEARCH
OCEAN SYSTEMS CENTER	—	CHIEF OF NAVAL MATERIAL
PERSONNEL RESEARCH & DEVELOPMENT CENTER	—	CHIEF OF NAVAL MATERIAL
RESEARCH LABORATORY	—	CHIEF OF NAVAL RESEARCH
SUBMARINE MEDICAL RESEARCH LABORATORY	MEDICAL R&D COMMAND	CHIEF, BUR OF MED/SUR
SURFACE WEAPONS CENTER	—	CHIEF OF NAVAL MATERIAL
UNDERSEAS RANGES DEPARTMENT	—	CHIEF OF NAVAL MATERIAL
UNDERWATER SYSTEMS CENTER	—	CHIEF OF NAVAL MATERIAL
WEAPONS CENTER	—	CHIEF OF NAVAL MATERIAL

TABLE 10 AIR FORCE RESEARCH AND DEVELOPMENT LABORATORY ORGANIZATIONAL RELATIONSHIPS

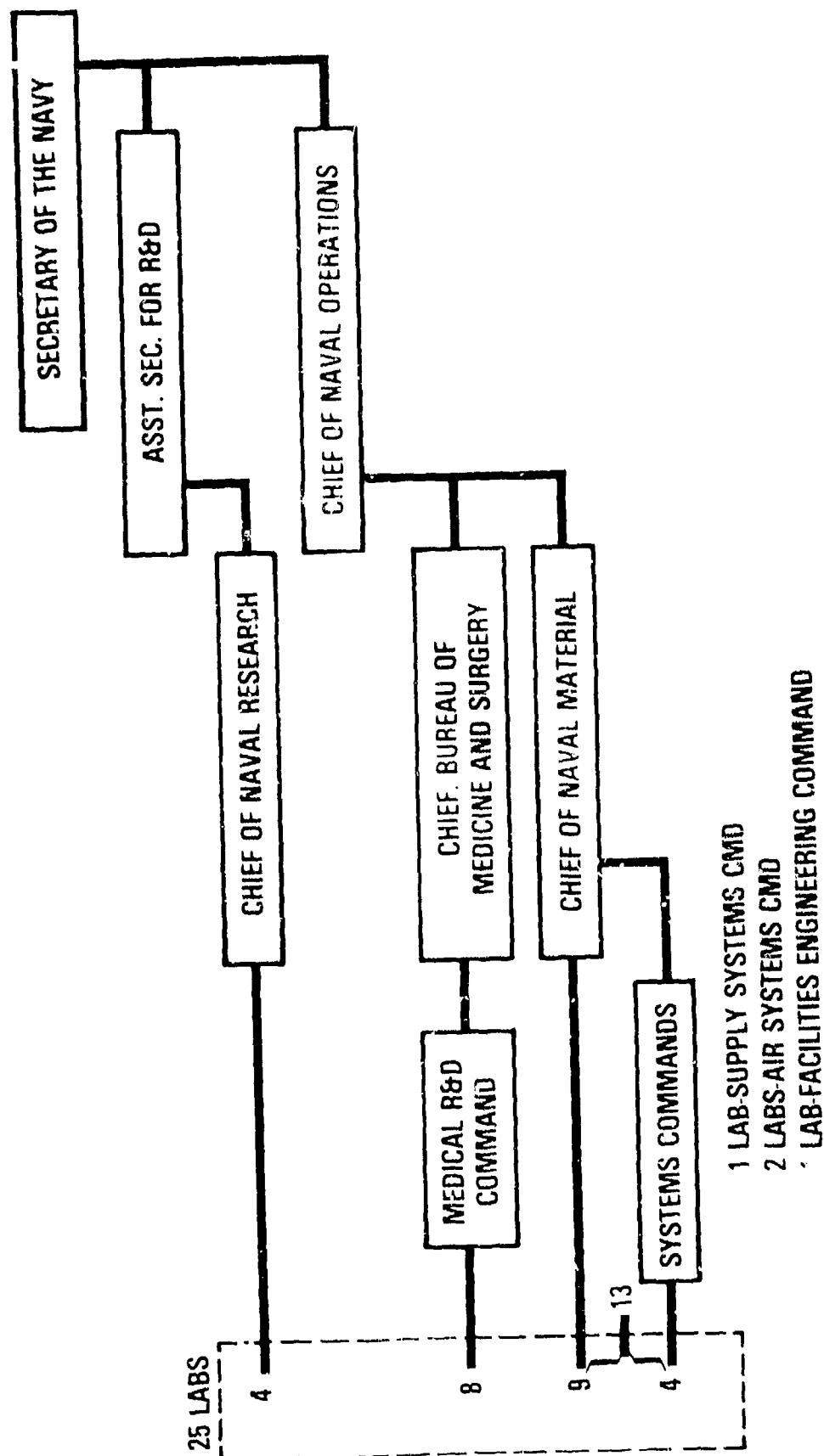
<u>INTERMEDIATE</u>		<u>COMMAND</u>
AEROPROPULSION LABORATORY	WRIGHT AERONAUTICAL LABS	AF SYSTEMS COMMAND
*ARMAMENT LABORATORY	ARMAMENT DEV & TEST CENTER	AF SYSTEMS COMMAND
AVIONICA LABORATORY	WRIGHT AERONAUTICAL LABS	AF SYSTEMS COMMAND
CIVIL AND ENVIRONMENTAL ENG DEV OFFIC	ENGINEERING SERVICES CENTER	HQ US AIR FORCE
FLIGHT DYNAMICS LABORATORY	WRIGHT AERONAUTICAL LABS	AF SYSTEMS COMMAND
FRANK J. SEILER RESEARCH LABORATORY	OFFICE OF SCIENTIFIC RES	AF SYSTEMS COMMAND
GEOPHYSICS LABORATORY	---	AF SYSTEMS COMMAND
HUMAN RESOURCES LABORATORY	---	AF SYSTEMS COMMAND
MATERIALS LABORATORY	WRIGHT AERONAUTICAL LABS	AF SYSTEMS COMMAND
ROCKET PROPULSION LABORATORY	---	AF SYSTEMS COMMAND
ROME AIR DEVELOPMENT CENTER	ELECTRONIC SYSTEMS DIVISION	AF SYSTEMS COMMAND
SCHOOL OF AEROSPACE MEDICINE	AEROSPACE MEDICAL DIVISION	AF SYSTEMS COMMAND
WEAPONS LABORATORY	---	AF SYSTEMS COMMAND
6570 AEROSPACE MEDICAL RESEARCH LABORATORY	AEROSPACE MEDICAL DIVISION	AF SYSTEMS COMMAND

* Laboratory portion not reported separately in this report. (For Armament Laboratory, see Armament Development and Test Center.)

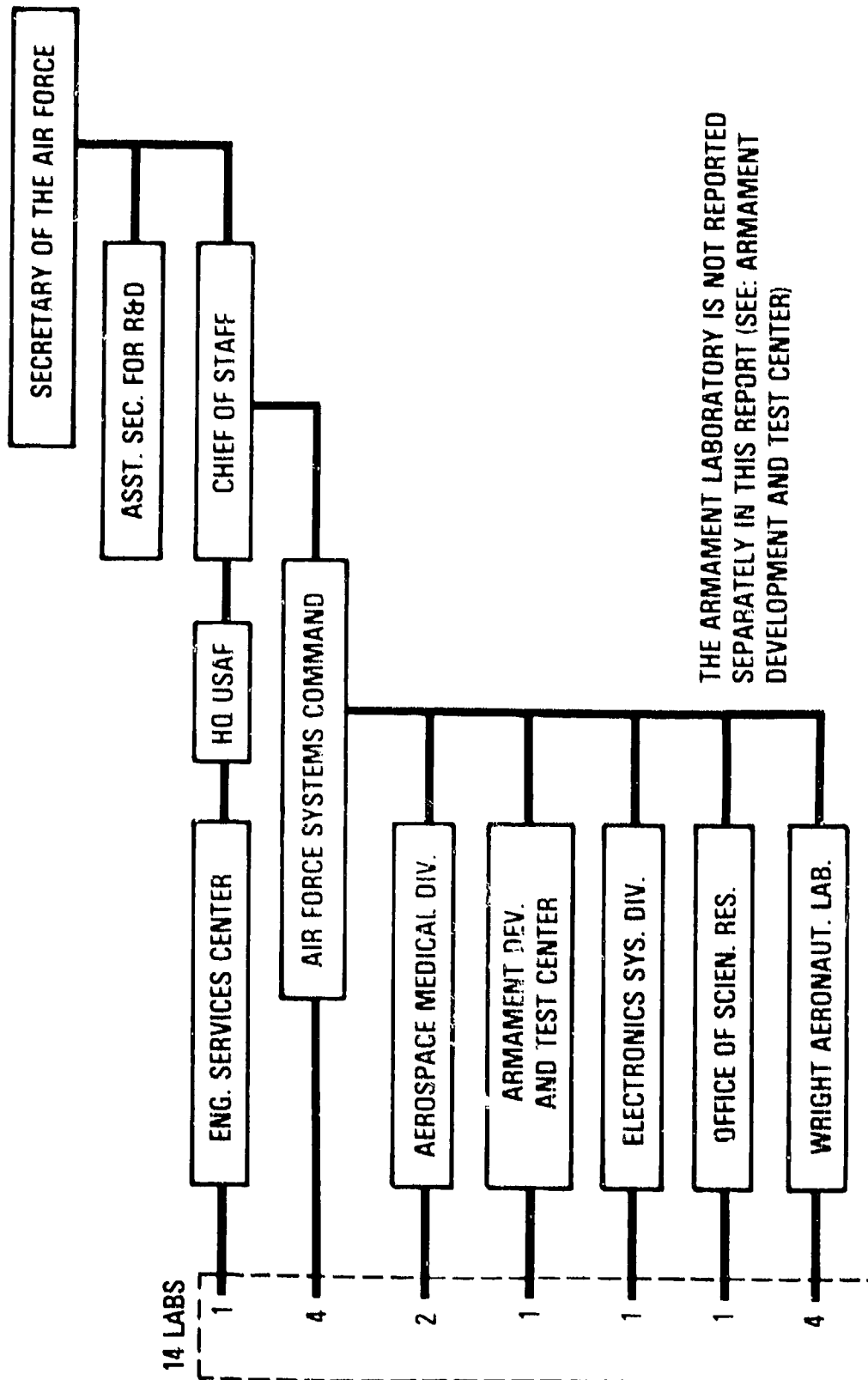
ARMY LABORATORIES COMMAND CHAIN



NAVY LABORATORIES COMMAND CHAIN



AIR FORCE LABORATORIES COMMAND CHAIN



THE ARMAMENT LABORATORY IS NOT REPORTED
SEPARATELY IN THIS REPORT (SEE: ARMAMENT
DEVELOPMENT AND TEST CENTER)

INSTALLATION: AEROMEDICAL RESEARCH LABORATORY

FT. RUCKER, AL.

CDR. COL. STANLEY C. KNAPP

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RD&E	3.268	3.206
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.018	0.000
TOTAL OTHER	1.083	1.300
TOTAL ANNUAL LAB	4.369	4.506
TOTAL INHOUSE	4.105	4.167
TOTAL INHOUSE RD&E	3.004	2.867
ANNUAL OPERATING COST	1.280	1.485

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	69	7	26	43
CIVILIAN	71	6	28	43
TOTAL	140	13	54	86

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
10	52.747	7.797	21.884	82.428	0.844	7.725

...MISSION

CDT FUND MTL/APPID RSCH ON MED ASPECTS OF AAWN, ABN & GND OPNS AFFECTING HLTH, WLF & EFFCY OF SOLDIER; PERF MED RSCH ON VIS/AUD FUNC; MAN/MACH INTEGRATION; MED ASPECTS OF NONMED MAT; PHYSIO/PSYCHO RSPNS TO OPNL ENVMNT & MIL OPNL TNG IMPACTS UPON ECOLOGY. PRIME DOD CONSULT IN ALL AREAS.

...CURRENT IMPORTANT PROGRAMS

MED HAZ ASSESSMENT OF MAJ WEAPON SYSTEMS
RSCH & DEV OF MED FACTORS INFLUENCING VEH & WPNS CREW PERFORMANCE
RSCH OF VIS & PSYCHOACOUSTICAL FACTORS OF MED IMPORTANCE TO ARMY CBT SYS
DIRECT APPLIED RSCH & DEV SPT TO ARMY AVN
FUNDAMENTAL BIOMED RSCH & DEV TO ESTB EQUIP ENVMNT & TASK DESIGN CRIT

...FUNCTIONS/EQUIPMENT/CAPABILITIES

ANECHOIC CHAMBER; COLORIMETER; ECG & EEG MACH; AUTOANALYZER; MASS SPECTRO; 3 DEGREE FREEDOM CLOSED-LOOP SERVOHYDRAULIC HEL SEAT MNTD SIMULATOR; SEQ MULTIANALYZER-COMPUTERIZED; SIMUHTMS (HFL SIMULATOR); HYBRID CPMT SYS (SEL -8500 DIGITAL MAINFRAME; SAI-601 ANALOG MAINFRAME; SAI-693 COMM INTERFACE; IMLAC PDS-10 DISPLAY PROCESSOR); FAST FOURIER SOUND ANALYZER; PHOTOMETRY LAB W/AUTOMATIC CIE ANAL RAPID SCAN SPPECTROMETER TRACEABLE TO BU OF SYDS; DROP TOWER FOR ANSI EVAL OF HEL SYS; THREE AXES PEGASUS MAN-RATED VIB PLATFORM W/HARDWARE CPMT CONT/ANAL SYS CAPABLE OF MOVING 600 LB LOAD 0-50 W/2 DB ERROR; HEMISPHERE W/SENSORS TO DETM HEAD PNTING CAPABILITY FOR USE IN CONJ W/VIB PLATFORM FOR DYNAMIC STUDIES; EMERG PHYSICIAN CALL SYS (10 MILE RADIUS); ELECTRON MICROSCOPES (2 EA); AUTOMATED TISSUE FIXA-TION SYS; ABN EQUIP; BIOCHEM LAB; ELECTRONIC & ENGR FAB SHOP & PHOTO LAB.

INSTALLATION: AIR DEFENSE BOARD

EL PASO, TX.

PRES. COL. JAMES C. CROSBY

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	2.872	3.052
TOTAL PROCUREMENT	2.062	1.406
TOTAL OCM	0.074	0.010
TOTAL OTHER	1.963	2.033
TOTAL ANNUAL LAB	6.971	6.501
TOTAL INHOUSE	6.971	6.501
TOTAL INHOUSE RDT&E	2.872	3.052
ANNUAL OPERATING COST	0.349	0.356

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	117	0	25	92
CIVILIAN	87	0	11	76
TOTAL	204	0	36	168

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
26	36.550	36.326	30.114	102.990	1.895	9.700

...MISSION

PLAN, CONDUCT, & REPORT ON OPERATIONAL TEST I, OPERATIONAL TEST II, OPERATIONAL TEST III, & OTHER USER-TYPE TESTS OF AD WEAPON SYS, FIRE DISTRIBUTION SYS, ELECTRONIC COUNTER MEASURES & COUNTER-COUNTER MEASURES EQUIP & DEVICES & TARGET DEVICES. PARTICIPATE IN DT I, DT II & DT III.

...CURRENT IMPORTANT PROGRAMS

SPT OF PATRIOT OT II
SPT OF DIVISION AIR DEFENSE ARTILLERY (DIVADA)
SPT OF AN/TSO-73 FOE II
MULTISTATIC RADAR SURVEILLANCE SYSTEM
CONCEPT EVALUATION OF EW COUNTERMEASURES SET IN THE AD ROLE

...FUNCTIONS/EQUIPMENT/CAPABILITIES

REVIEW & COMMENT ON TRAINING DEVICE REQUIREMENTS DOCUMENTS, ORGANIZATION PHASE DOCUMENTS, NEW EQUIPMENT TRAINING PACKAGES, & ASSIST IN REVIEW OF MILITARY SPECS. PROVIDE TRADOC TEST REQUIREMENTS FOR THE COORDINATED TEST PROGRAM. PLAN, DIRECT & CONTROL A PROGRAM IN TEST METHODOLOGY, TEST INSTRUMENTATION, & TEST FACILITIES NEEDED TO SUPPORT CURRENT & FUTURE TEST REQUIREMENTS WITHIN ASSIGNED MISSION AREA. SPT FIELD RE-SEARCH, STUDIES, TESTS, & OPERATIONS OF TRADOC, DA OR DOD AGENCIES AS REQUIRED & DIRECTED BY CG USA AIR DEFENSE CENTER & FORT BLISS. EQUIPMENT: ACCESS TO COMPUTER, TAC & INSTRUMENTATION RADAR, AUTOMATED DATA ACQ SYS, RICS, CINETHOODOLITES, PHOTO LAB & FILM READING EQUIP, SITE MONITOR FOR ELECTRONICS TEST OF EQUIP & DONA ANA & NORTH MCGREGOR RANGES FOR FIRING FORWARD AREA WEAPONS AT TARGET DEVICES & DRONES

INSTALLATION: AIRBORNE BOARD

FT. BRAGG, N.C.

PRES. COL. G. G. THOMAS, JR.

ENGR. ADV. MR. GEORGE G. GORE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	2.017	1.032
TOTAL PROCUREMENT	0.000	0.000
TOTAL OEM	0.206	0.000
TOTAL OTHER	1.183	1.000
TOTAL ANNUAL LAB	3.406	2.032
TOTAL INHOUSE	3.406	2.032
TOTAL INHOUSE RDT&E	2.017	1.032
ANNUAL OPERATING COST	1.000	0.877

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	87	0	14	73
CIVILIAN	41	0	6	35
TOTAL	128	0	20	108

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	LAB SPACE (THOUSANDS OF SQUARE FEET)	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
27	3.978	3.914	39.390	47.282	0.971	3.651

...MISSION

THE MISSION OF THE ABN BD IS TO PLAN, CONDUCT AND REPORT ON OTI & II, FOTE AND OTHER USER TYPE TESTS OF AIRBORNE ITEMS; PARTICIPATE IN DT I, II & III AS DIRECTED; PROVIDE ADVICE AND GUIDANCE ON TEST AND EVALUATION MATTERS. CONDUCT SPECIFIC TESTS & EVALUATIONS AS DIRECTED.

...CURRENT IMPORTANT PROGRAMS

LAPES

STANDARD AIRDROP OF SELECTED ITEMS OF EQUIPMENT

EXTERNAL AIR TRANSPORTABILITY

G-11B CARGO PARACHUTE

FAMILY OF HELICOPTER EXTERNAL SLINGS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

FACILITIES INCLUDE: MAIN OFC BLDG, ABN HANGAR, INSTRUMENTATION/DESIGN INTERFACING SECTION, COMBINED SHOP & ADP FACILITY. MAJOR EQUIPMENT INCLUDES: 25-TON CRANE, 2 20-TON MOBILE CRANES, 5-TON WRECKER, 40,000 LB ACFT LOADER, THREE T-28B MODEL ACFT, 1 UH-1H HELICOPTER, VARIOUS TYPES OF STANDARD PARACHUTES, NINE GASOLINE GENERATORS, DIGITAL THEODOLITES, WEATHER STATION, ELECTRONIC DIAGNOSTIC EQUIPMENT, VOLTMETERS, AMMETERS, SPECTRUM ANALYZERS, SOUND & VIBRATION ANALYZERS, TIME MARK GENERATORS, OSCILLOSCOPES, MULTIMETERS, RANDOM NOISE GENERATORS, POWER SUPPLIES, 0 METERS, ATTENUATORS, GRAPHIC LEVEL RECORDERS, 16MM CAMERAS, FILM ANALYZER S, PORTABLE VIDEO EQUIPMENT, VAN METER, ANALOG TAPE RECORDER, 1 GRAPHIC LEVEL, FREQUENCY COUNTERS, SOUND LEVEL CALIBRATORS, METER CALIBRATORS, MEGOHMMETER.

INSTALLATION: AIRCRAFT DEVELOPMENT TEST ACTIVITY

FT. RUCKER, AL.

CDR. COL. WILLIAM E. CROUCH, JR. TECH. DIR. DR. JAMES S. KISHI

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	6.747	7.409
TOTAL PROCUREMENT	0.198	0.422
TOTAL O&M	1.091	2.089
TOTAL OTHER	2.193	3.677
TOTAL ANNUAL LAB	10.229	13.597
TOTAL INHOUSE	6.206	8.553
TOTAL INHOUSE RDT&E	3.190	3.369
ANNUAL OPERATING COST	5.344	5.573

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	217	0	26	191
CIVILIAN	93	1	12	81
TOTAL	310	1	38	272

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1196	0.000	39.124	118.026	157.150	1.782	26.051

...MISSION

TO PLAN, CONDUCT, EVALUATE, AND REPORT ON THE GOVERNMENT TEST ELEMENTS-
EDT-G, ADVT-G, PQT-G, PVT-G, AND TO MONITOR, EVALUATE, AND REPORT ON CONTR
TESTS UNDER SIDTC CONCEPT FOR AIRCRAFT, AIRCRAFT COMPONENTS AND RELATED
EQUIPMENT. CONDUCT OTHER TESTS AND EVALUATIONS AS DIRECTED BY TECOM.

...CURRENT IMPORTANT PROGRAMS

AAH DEVELOPMENT TEST PROGRAM
UH-60A BLACKHAWK DEVELOPMENT TEST PROGRAM
CH-47C RAM/712 ENGINE TEST PROGRAM
ALQ-136 RADAR JAMMER DEVELOPMENT TEST
APR-39 RADAR WARNING RECEIVER DEVELOPMENT TEST

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PLAN, CONDUCT, RECORD, EVALUATE AND REPORT RESULTS OF ASSIGNED TESTS & EVAL.
SUPPORT DT EFFORTS OF COMMODITY COMMANDS RESP FOR DEV OF AVN MATERIEL.
PERFORM SOLDIER TESTING TO EVAL HFE, SAFETY, AND MAN-MACHINE INTERFACE.
PROVIDE DATA CONCERNING OPERATIONS UNDER EXTREME ENVIRONMENTAL COND.
CONDUCT PI T STS OF FIELDED AVN MATERIEL TO IMPROVE SYSTEM CAP & RAM.
REVIEW AND COMMENT ON NEW EQUIPMENT TRAINING PACKAGES.
PARTICIPATE IN THE DEVELOPMENT AND REVIEW OF MILITARY SPECIFICATIONS.
PROVIDE ADVICE & GUIDANCE ON T&E MAT TO DEVELOPERS, PRODUCERS & INDUSTRY.
PROVIDE AIRCRAFT & SUPPORT AS REQUESTED TO SPT US ARMY SPONSORED TESTS.
PARTICIPATE IN CONDUCT OF COMB DT/OT & OBSERVES OT WHEN DIRECTED.
SUPPORT FIELD RESEARCH, STUDIES & TESTS AS REQ & DIR BY CG, TECOM.
PROVIDE TECOM TEST REQUIREMENTS FOR COORDINATED TEST PROGRAMS.

INSTALLATION: ARMOR AND ENGINEER BOARD

FT.KNOX,KY.

PRES.COL. JIMMY L. PIGG

CIV.TECH.DIR.MR. JAMES C.KETON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	6.128	5.885
TOTAL PROCUREMENT	0.171	0.737
TOTAL OEM	0.103	0.472
TOTAL OTHER	3.233	3.518
TOTAL ANNUAL LAB	9.635	10.612
TOTAL INHOUSE	9.635	10.612
TOTAL INHOUSE RDT&E	6.128	5.885
ANNUAL OPERATING COST	0.500	0.559

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	232	0	74	158
CIVILIAN	101	2	12	89
TOTAL	333	2	86	247

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
6900	6.200	54.455	151.508	212.163	1.419	2.411

...MISSION

PLAN, CONDUCT, & REPORT DT I, II, III, FDTE, CEP, TEA, & OTHER USER TESTS OF AR & ENGR EQ. PARTICIPATE IN DT I, II, III & SP STUDY OF CML EQ. PROVIDE GUID & ADVICE TO DEVELOPERS, PRODUCERS, OTHER SVCS & PRIVATE INDUSTRY. PLAN, MGT CO-ORDINATE & REPORT ON CVTP. PROVIDE ADM, LOGIS, & OPN SPT TO OCO.

...CURRENT IMPORTANT PROGRAMS

COMBAT VEHICLE TECHNOLOGY PROGRAM

SURFACE LAUNCHED UNIT FUEL AIR EXPLOSIVE (SLUFAE) DT II

GROUND EMPLACED MINE SCATTERING SYSTEM (GEMSS) DT II

VALIDATION OF PROPOSED AERIAL GUNNERY PROGRAM, TNG EFFECTIVE ANALYSIS FDT XH915 TRUCK TRACTOR, LINE HAUL, 6X4, COMMERCIAL (FDTE)

...FUNCTIONS/EQUIPMENT/CAPABILITIES

REMOTE CONTROLLED, VARIABLE SPEED, RELOCATABLE MOVING TARGET; REMOTE CONTROLLED, HIT INDICATING, RELOCATABLE STATIONARY TARGET; TARGET SPOTTING SYSTEM (TSS); VIDEO AUTOMATIC TARGET TRACING SYSTEM (VATTS); SIM-FIRE HIT-KILL INDICATOR; GUN CAMERA, SINGLE FRAME - 35 MM CINE - 16 MM POSITION LOCATION EQUIP; TANK VIDEO SYSTEM; EXPANDABLE TEST INSTRUMENT VAN; 16MM MOTION PICTURE, WITH DATADORS; VIDEO BASED DATA ANALYZING EQ; ADVANCED DIRECT FIRE WEAPONS SIMULATOR SYSTEM; THRU-OPTICS CAMERA ADAPTR GUN ELEVATION DEVICE; TARGET SCORING SYSTEM; SIMFIRE RADIO FREQUENCY. VIDEO HARD COPY UNIT; SGL LENS REFLEX CAMERA; 15 TRANSPONDERS FOR MOTOROLA TRACKING SYSTEM; 40 TON OVERHEAD CRANE; MACHINE SHOP & SHOP MAINT EQUIP SETS; COMBAT VEH, TACTICAL WILD VEH; ENGR CONSTR EQ; CALIBRATION MOTOROLA POSITIONING SYSTEMS; ELEVATED CAMERA PLATFORM.

INSTALLATION: ATMOSPHERIC SCIENCES LABORATORY

WHITE SANDS MR, N.M.

CDR.DIR.COL.WILLIAM E.RAWLINSON,JR.

DEP.DIR.HENRY RACHELE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1976 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	16.805	19.188
TOTAL PROCUREMENT	0.266	0.000
TOTAL O&M	0.031	0.060
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	17.102	19.248
TOTAL INHOUSE	5.324	7.245
TOTAL INHOUSE RDT&E	5.067	7.185
ANNUAL OPERATING COST	3.381	3.837

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	412	0	13	399
CIVILIAN	175	19	86	89
TOTAL	587	19	99	488

ACRES	SPACE AND PROPERTY				COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP	
45	61.354	81.245	17.255	159.854	18.000	23.080	

...MISSION

RESPONSIBLE FOR THAT PORTION OF ERADCOM MISSION DEVOTED TO RESEARCH IN ATMOSPHERIC SCIENCES, DEVELOPMENT OF METEOROLOGICAL TECHNIQUES AND EQUIPMENT FOR FIELD ARMY. FURNISH METEOROLOGICAL SERVICES TO ARMY RDTE ACTIVITIES.

...CURRENT IMPORTANT PROGRAMS

FIELD ARTILLERY METEOROLOGICAL ACQUISITION SYSTEM
ATMOSPHERIC CHARACTERIZATION (SMOKE/AEROSOLS/EO/NMMW)
REMOTE ATMOSPHERIC SENSING AND PROBING
ATMOSPHERIC MODELS FOR F-O SYSTEMS
METEOROLOGICAL SUPPORT TO RDTE ACTIVITIES

...FUNCTIONS/EQUIPMENT/CAPABILITIES

METEOROLOGICAL RESEARCH FACILITY AND CAPABILITY
MOBILE ATMOSPHERIC CHARACTERIZATION EQUIPMENT
ATMOSPHERIC PHYSICS RESEARCH FACILITY AND CAPABILITY
UPPER ATMOSPHERE RESEARCH AND SOUNDING ROCKET FACILITY AND CAPABILITY
ION MASS SPECTROMETER SYSTEM
METEOROLOGICAL SOUNDING ROCKET FACILITIES-N.M.,UTAH,ALASKA,CANAL ZONE
REMOTE ATMOSPHERIC SENSING FIELD RESEARCH FACILITY
ATMOSPHERIC SPECTROSCOPY - LASER PROPAGATION FACILITY
METEOROLOGICAL RDTE SUPPORT FACILITIES - ALASKA TO CANAL ZONE
METEOROLOGICAL INSTRUMENTATION TEST,MAINTENANCE,CALIBRATION FACILITY
FACILITY FOR SONIC OBSERVATION OF TRAJECTORY AND IMPACT OF MISSILES
HIGH ENERGY LASER TEST FACILITY

INSTALLATION: AVIATION BOARD

FT. RUCKER, AL.

PRES. COL. ROBERT A. BONIFACIO TECH. ADV. GEORGE E. SLAGLEY

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	1.483	1.517
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.251	0.635
TOTAL OTHER	1.199	1.348
TOTAL ANNUAL LAB	2.933	3.500
TOTAL INHOUSE	2.629	3.364
TOTAL INHOUSE RDT&E	1.374	1.381
ANNUAL OPERATING COST	1.303	1.301

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	79	0	29	50
CIVILIAN	36	1	13	23
TOTAL	115	1	42	73

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1	0.000	30.003	12.961	42.964	0.170	0.043

...MISSION

MISSION: THE CONDUCT OF OPERATIONAL TEST I, II, III, FOR NON-MAJOR AND MAJOR SYSTEMS AND OTHER TESTS AS DIRECTED BY HEADQUARTERS TRADOC. SPECIFICALLY, THE AVIATION BOARD DESIGNS AND CONDUCTS TESTING AND EVALUATION OF AVIATION SYSTEMS AND SUBSYSTEMS AND ANCILLIARY EQUIPMENT.

...CURRENT IMPORTANT PROGRAMS

FO167 J-CATCH
OT391 AN/ALQ136 RADAR JAMMER
OT263A ADVANCED RADAR WARNING RECEIVER
OT468 DOPPLER NAVIGATION SUBSYSTEM-LIGHT WEIGHT
FO194 SHOCK PULSE ANALYZED DIAGNOSTIC EQUIPMENT

...FUNCTIONS/EQUIPMENT/CAPABILITIES

NO MAJOR EQUIPMENT OR FACILITY

INSTALLATION: AVIATION ENGINEERING FLIGHT ACTIVITY

EDWARDS AFB, CA.

CDR. COL. DENNIS M. BOYLE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACTY + EST)
TOTAL RDT&E	4.349	3.927
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.929	0.980
TOTAL ANNUAL LAB	5.278	4.907
TOTAL INHOUSE	5.278	4.907
TOTAL INHOUSE RDT&E	4.349	3.927
ANNUAL OPERATING COST	0.175	0.190

PERSONNEL	PERSONNEL DATA (END OF FY 1970)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	64	0	21	43
CIVILIAN	108	0	35	73
TOTAL	172	0	56	116

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
19	9.200	16.000	124.800	150.000	3.632	7.417

...MISSION

PRODUCE ENGINEERING FLY TEST DATA ON ACFT PERFORMANCE, HANDLING QUALITIES SYSTEM/SUBSYSTEM INTERFACE AND INTEGRATED SYSTEM RAM; SUSTAIN THE CAPABILITY TO COMPLETELY INSTRUMENT TEST VEHICLES WITH ONBOARD MAGNETIC TAPE AND COMPUTERIZED REAL TIME DATA REDUCTION. CONDUCT PRE-TPS ORIENT.

...CURRENT IMPORTANT PROGRAMS

BLACKHAWK VALIDATION TEST
UH-60A ICING TEST A&FC
JCH-47C FIBERGLASS ICING TEST
UH-1A KIT A ICING
JAH-1S PNVs

...FUNCTIONS/EQUIPMENT/CAPABILITIES

1JT-28B 11-28B 10V-1C 1JNV-1C 1JAH-1S 2JCH-47C 1JCH-58C 5JUH-1H ACFT.
ACFT MAINT CAPABILITY
ACFT MODIFICATION CAPABILITY
ACFT INSTRUMENTATION CAPABILITY
EMR COMPUTER WITH TELEMTRY
HAIKORNE DATA AQUISITION SYSTEMS
3REMOY GROUND STATIONS WITH COMPUTER AND TELEMTRY CAPABILITY
1MILIKI CAMERA
1FAIRCHILD FLT ANALYSER
1MAGNETIC TAPE COMPOSER SYSTEM
3MAGNETIC TAPE TYPEWRITERS 3MAGCARD TYPEWRITERS

INSTALLATION: AVIATION RESEARCH & TECHNOLOGY LABORATORIES MOFFETT FIELD, CA.

DIR. DR. RICHARD M. CARLSON

DEP. DIR. COL. JOHN B. FITCH

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978	1979
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	34.105	33.711
TOTAL PROCUREMENT	1.026	1.812
TOTAL O&M	0.168	0.250
TOTAL OTHER	0.398	0.476
TOTAL ANNUAL LAB	35.697	36.249
TOTAL INHOUSE	17.001	15.698
TOTAL INHOUSE RDT&E	16.351	14.752
ANNUAL OPERATING COST	2.848	2.434

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	26	1	13	13
CIVILIAN	568	20	233	335
TOTAL	594	30	246	348

ACRES	SPACE AND PROPERTY				COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP	
	LAB	ADMIN	OTHER				
127	88.848	58.673	16.370	163.891	1.431	4.211	

...MISSION

MANAGES AND EXECUTES R&D OF ARMY AIRMOBILE SYSTEMS, THROUGH DEMONSTRATION OF TECHNOLOGY. PROVIDES TECHNICAL SUPPORT TO PROJECT/PRODUCT MANAGERS & SYSTEM DEVELOPERS AS REQUIRED. PROVIDES INDEPENDENT TECHNICAL RISK ASSESSMENT TO CG USAAVRADCOM AND HIGHER AUTHORITY.

...CURRENT IMPORTANT PROGRAMS

RESEARCH IN FUNDAMENTAL ROTOR AERODYNAMICS, DYNAMICS & NOISE.
RESEARCH & DEVELOPMENT OF SMALL GAS TURBINES.
R&D TO IMPROVE RELIABILITY & MAINTAINABILITY OF AIRMOBILE SYSTEMS.
RSCH. COMPOSITES & MEASURE OPNL. FLT. LOADS TO IMPROVE STRUCTURES FOR A/C
EVOLVE TECHNOLOGY & CRITERIA TO IMPROVE FLIGHT SAFETY & SURVIVABILITY.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

THREE LABORATORIES AT MOFFETT FIELD CA, CLEVELAND OH, HAMPTON VA; COLOCATED WITH NASA, PARTICIPATING IN RESEARCH OF AIRMOBILE SYSTEMS & DISCIPLINES, JOINTLY USING WIND TUNNELS, SIMULATORS & LABORATORY TEST FACILITIES, INCLUDING SHOPS, FLIGHT LINE & HANGER, STRUCTURE LAB, ENGINE TEST FACILITIES & COMPUTATIONAL EQUIPMENT. FOURTH LABORATORY AT FORT EUSTIS VA., PERFORMING ADVANCED APPLICATIONS WORK. MAJOR EQUIPMENT & FACILITIES: FILAMENT WINDING MACHINES, TENSILE TESTERS, VIBRATION TESTER, SMALL BALLISTIC RANGE, CALIBRATION LAB, ENVIRONMENT CHAMBER, ATOMIC ABSORPTION SPECTR, TELEMETER GROUND STATION, NON-DESTRUCT TESTING FACILITY, FLIGHT SAFETY LAB.

INSTALLATION: AVIONICS R & D ACTIVITY

FT. MONMOUTH, N.J.

CDR. COL. D. PETERSEN

DEP. DIR. MR. T. SUETA

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	10.756	10.391
TOTAL PROCUREMENT	4.866	4.644
TOTAL O&M	1.537	1.811
TOTAL OTHER	0.188	0.248
TOTAL ANNUAL LAB	17.347	17.094
TOTAL INHOUSE	9.408	9.958
TOTAL INHOUSE RDT&E	5.771	5.533
ANNUAL OPERATING COST	2.742	3.227

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	12	0	7	5
CIVILIAN	194	5	130	55
TOTAL	206	5	146	60

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL REAL PROP	EQUIP
0	16.000	33.500	0.000	49.500	0.000	7.852

...MISSION

RESPONSIBLE FOR THAT PORTION OF AVRADCOM'S MISSION WHICH PERTAINS TO AVIATION ELECTRONICS FROM RESEARCH THRU FIRST TIME PRODUCTION. THIS ENCOMPASSES BOTH GROUND AND AIRBORNE EQUIPMENT FOR COMMUNICATIONS, NAVIGATION, INSTRUMENTATION, ENVIRONMENT, SENSING, LANDING AND AIR TRAFFIC MGT.

...CURRENT IMPORTANT PROGRAMS

ARMY DIGITAL AVIONICS SYSTEMS
INTEGRATED AVIONICS CONTROL SYSTEM, IACS
AVIATION MAP-OF-THE-EARTH COMMUNICATIONS
WIRE AND WIRE LIKE OBJECT DETECTION SYSTEM
VERY LIGHTWEIGHT AIR TRAFFIC MANAGEMENT EQUIPMENT

...FUNCTIONS/EQUIPMENT/CAPABILITIES

MAJOR EQUIPMENT INCLUDES NIGHT NAVIGATION PILOTAGE SYSTEM, DIGITAL HOT BENCH, SYMBOLOGY GENERATOR, WIRE DETECTION AND RECOGNITION SIMULATOR, DIGITALLY ADDRESSABLE MULTI-LEGEND DISPLAY SWITCH, MICROPROCESSOR INTERFACE UNIT, AND A LARGE SCALE COMPUTER DYNAMIC SIMULATION OF A GLOBAL POSITIONING SYSTEM/DOPPLER VELOCITY SENSOR HYBRID NAVIGATION SYSTEM. FACILITIES INCLUDE: ACOUSTIC/AUDIO ANALYSIS FACILITY, TACTICAL AVIONICS SYSTEM SIMULATOR, ENVIRONMENT VEHICLE FOR AVIONICS RESEARCH, SKC-2000 DATA ACQUISITION SYSTEM, ANTENNA RANGE ELECTROMAGNETIC INTERFERENCE TEST FACILITY, CAD-E FACILITY, MICROPROCESSOR DEVELOPMENT CENTER, DATA FORMATTING FACILITY AND AIR TRAFFIC MANAGEMENT SYSTEM DESIGN TEST CENTER

INSTALLATION: BALLISTIC RESEARCH LABORATORY

ABERDEEN PROV. GR., MD

DIR. DR. ROBERT J. EICHELBERGER DEP. DIR. COL. ROBERT M. GOMEZ

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL ROT&E	45.382	44.205
TOTAL PROCUREMENT	0.134	0.000
TOTAL O&M	1.948	1.379
TOTAL OTHER	1.729	1.813
TOTAL ANNUAL LAB	49.193	47.397
TOTAL INHOUSE	30.635	29.897
TOTAL INHOUSE ROT&E	28.230	27.705
ANNUAL OPERATING COST	10.509	11.469

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	26	2	15	11
CIVILIAN	524	102	372	152
TOTAL	550	104	387	163

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
1920	539.702	11.200	40.982	591.884	14.595	26.598

...MISSION

CONDUCT RESEARCH AND EXPL DEV IN SCIENCES/TECHNOLOGIES NECESSARY FOR
CONCEIVING, DESIGNING, DEVELOPING AND EVALUATING WEAPON SYSTEMS
PURSUE ORIENTED FUND RESEARCH IN PHYS, CHEM, MATH, ENGINEERING SUBJECTS
INVESTIGATE PERTINENT BRANCHES OF MILITARY SCIENCES AND TECHNOLOGIES

...CURRENT IMPORTANT PROGRAMS

PROPULSION DYNAMICS OF HYPERVELOCITY AND CONVENTIONAL GUNS
EFFECTS OF CONVENTIONAL/NUCLEAR WARHEADS AND BALLISTIC PROTECTION
WARHEAD DYNAMICS, PENETRATION, FRAGMENTATION, EXPLOSIVE/METAL INTERACTIONS
FLIGHT DYNAMICS OF PROJECTILES AND MISSILES; ARTILLERY FIRING TABLES
VULNERABILITY ANALYSIS/VULNERABILITY REDUCTION ARMY MATERIEL, AIRCRAFT

...FUNCTIONS/EQUIPMENT/CAPABILITIES

EXPLOSIVE BLAST CHAMBERS, AERODYNAMIC RANGES, HIGH ALTITUDE BLAST SPHERE
SHOCK TUBES TO SIMULATE NUCLEAR BLAST; MEASURE CHEMICAL REACTION RATES
SOFT RECOVERY SYSTEM FOR ARTILLERY SHELLS, HIGH SPEED MOTION PHOTOGRAPHY
SPARK PHOTOGRAPHY RANGES, X-RAY CINEPHOTOGRAPHY, FLASH HOLOGRAPHIC SYST
FIELD TEST FACILITIES FOR PROJECTILE, EXPLOSIVE, AND ARMOR RESEARCH TESTS
ANALOG COMPUTER FOR SIMULATION OF KINEMATICS OF GUNS AND RIFLES
CENTRAL SITE COMPUTATIONAL FACILITY WITH 60 REMOTE INTERACTIVE TERM AND
8 REMOTE BATCH TERMINALS
PULSED FLOW CHEMICAL REACTOR SYSTEM

INSTALLATION: CHEMICAL SYSTEMS LABORATORY

ABERDEEN PRO.GR.,MD.

CDR.COL. JOHN D. SPENCE

TECH.DIR.DR. BENJ L. HARRIS

PROGRAM DATA BY FISCAL YEAR (MILLION \$)

PROGRAM	1978	1979
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	48.272	53.091
TOTAL PROCUREMENT	17.857	6.667
TOTAL O&M	6.400	11.500
TOTAL OTHER	1.090	1.220
TOTAL ANNUAL LAB	73.619	72.498
TOTAL INHOUSE	45.235	53.947
TOTAL INHOUSE RDT&E	35.758	39.925
ANNUAL OPERATING COST	7.200	7.800

PERSONNEL	PERSONNEL DATA AUTHORIZED STRENGTH	(END OF FY 1978)		NON- PROF
		TOTAL PHDS	TOTAL PROF	
MILITARY	125	30	76	49
CIVILIAN	370	52	510	360
TOTAL	495	82	586	409

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL REAL PROP	EQUIP
1750	435.000	235.000	780.000	1450.000	27.800
					17.000

...MISSION
CLASS II ACTIVITY CONDUCTING A RESEARCH & DEVELOPMENT MISSION FOR ARMY
CHEMICAL MUNITIONS & DEFENSIVE ITEMS. INCLUDES BASIC RESEARCH AND
GENERAL INVESTIGATIONS AS WELL AS EXPLORATORY, ADVANCED AND ENGINEERING
DEVELOPMENT OF MATERIAL.

...CURRENT IMPORTANT PROGRAMS
DEVELOP SMOKE/AEROSOL MUN FOR SCREEN
BIOLOGICAL & CHEMICAL AGENT ALARM DEVELOPMENT
NEW PROTECTIVE MASK DEVELOPMENT : CHEMICAL DECONTAMINATION PROGRAM
BINARY LETHAL CHEMICAL AGENT PROJECTILE DEVELOPMENT
THERAPEUTIC & PROPHYLACTIC MEDICAL DEFENSE AGAINST CHEM WARFARE AGENTS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
MAJOR EQUIP IS CONTAINED IN A COMPLEX OF ENGR/LAB AREAS. INCLUDES CML
PILOT PLANTS, MUN FILL, ENGR DESIGN, EXPER FAB SHOPS, AEROSOL DISSEM
TEST CHAMBERS, PYRD TECH MIX LOAD HANDLING FAC, INDOOR BALLISTIC RANGE,
SUBSONIC-SUPERSONIC, TRANSONIC WIND TUNNEL. A COMPLETE CLINICAL RESEARCH
FACILITY, AN ANIMAL BREEDING - HOLDING FACILITY.

INSTALLATION: COLD REGIONS R&E LABORATORY

HANOVER, N.H.

CDR. LTC. A.B. DEVEREAUX, JR.

TECH. DIR. DR. D.R. FREITAG

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978	1979
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	5.022	5.096
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.164	0.120
TOTAL OTHER	2.473	2.908
TOTAL ANNUAL LAB	7.659	8.124
TOTAL INHOUSE	5.763	6.139
TOTAL INHOUSE RDT&E	3.545	3.615
ANNUAL OPERATING COST	2.235	2.400

PERSONNEL	PERSONNEL DATA (END OF FY 1978)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	14	1	5		9
CIVILIAN	263	31	128		135
TOTAL	277	32	133		144

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
24	80.786	30.027	128.544	239.357	7.894	6.959

...MISSION

AS THE ARMY LABORATORY FOR SCIENCE AND TECHNOLOGY IN COLD REGIONS, USACRREL CONDUCTS AND COORDINATES RESEARCH APPLICABLE TO THE ARMY'S NEEDS IN THOSE GEOGRAPHIC AREAS OF THE WORLD WHERE WINTER WEATHER AND COLD REPRESENTS A SEVERE PROBLEM.

...CURRENT IMPORTANT PROGRAMS

DESIGN, CONSTRUCTION, AND OPERATIONS TECHNOLOGY FOR COLD REGIONS
RESEARCH IN SNOW, ICE, AND FROZEN GROUND
ICE ENGINEERING
LAND TREATMENT OF WASTEWATER
MOBILITY AND ENVIRONMENTAL RESEARCH

...FUNCTIONS/EQUIPMENT/CAPABILITIES

THE MAIN LABORATORY AT USACRREL CONTAINS 24 COLD LABS WHICH CAN BE OPERATED TO -58 F, SPECIAL TESTING APPARATUS FOR FROZEN MATERIALS, AN ICE ENGINEERING FACILITY FOR LARGE MODELING EXPERIMENTS WITH ICE, A CHEMISTRY LAB, AN ELECTRON MICROSCOPE LAB, A SOILS PROCESSING LAB, A PAVEMENT TEST FACILITY FOR TESTING UNDER FREEZING/THAWING CONDITIONS, A WASTEWATER TREATMENT RESEARCH FACILITY, A COMPUTER FACILITY, A MASS SPECTROMETER, A GAS CHROMATOGRAPH, AND A SMALL LASER FACILITY. THE ALASKA PROJECTS OFFICE AT FAIRBANKS CONDUCTS RESEARCH AND PROVIDES LOGISTIC SUPPORT FOR OTHER RESEARCH. USACRREL'S MILITARY AND CIVILIAN PERSONNEL HAVE EXPERTISE COVERING A WIDE RANGE OF SCIENTIFIC AND ENGINEERING DISCIPLINES RELATED TO COLD REGIONS RESEARCH.

INSTALLATION: COLD REGIONS TEST CENTER

APD SEATTLE, WA.

CDR. COL. JAMES F. HENRIONNET TECH. ADV. MR. WILLIAM J. HASLE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + FST)
TOTAL RDT&E	4.118	4.045
TOTAL PROCUREMENT	0.048	0.033
TOTAL O&M	0.017	0.017
TOTAL OTHER	4.033	4.195
TOTAL ANNUAL LAB	8.216	8.290
TOTAL INHOUSE	8.216	8.290
TOTAL INHOUSE RDT&E	4.118	4.045
ANNUAL OPERATING COST	3.275	3.496

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	282	0	95	187
CIVILIAN	22	0	5	17
TOTAL	304	0	100	204

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
647155	2.715	20.457	268.622	291.794	12.196	5.762

...MISSION

PLAN CONDUCT EVALUATE REPORT ON ENVIRONMENTAL PHASE OF DEVELOPMENT TESTS
EMPLOY INTEGRATED TESTING POLICYS DURING DEVELOPMENT TESTING PROVIDE
TECH INFO ADVICE GUIDANCE ON TESTS TO GOVT AGENCIES AND INDUSTRY CONDUCT
OTHER TESTS AND EVALUATIONS AS DIRECTED BY CG TECOM

...CURRENT IMPORTANT PROGRAMS

GROUND LASER LOCATOR DESIGNATOR/CANNON LAUNCHED GUIDED PROJECTILE (GLLD)
GROUND EMPLACED MINE SCATTERING SYSTEM (GEMSS)
SURFACE LAUNCHED UNIT FUEL AIR EXPLOSIVE (SLUFAE)
ROLAND IT
L1 6A2 81 MM MORTAR UNITED KINGDOM

...FUNCTIONS/EQUIPMENT/CAPABILITIES

FACILITY CAN ACCOMMODATE A WIDE VARIETY AND LARGE NO OF TESTS AT ANY ONE
TIME. SEVERAL VEH TST COVRSGS AND EXTENSIVE CROSS COUNTRY TERRAIN RANGES
ARE VERSATILE 500 THOUS ACRE ISOLATED IMPACT AREA, 50KM MAX UNOBSERVED
RANGE. LARGE RESTRICTED AIRSPACE AREA WITH UNRESTRICTED FIRING TO 5000 FT
ORDINATE. COORDINATION WITH FAA CAN EFFECT UNRESTRICTED ORDINATE. 1ST 2ND
OR 3RD ORDER SURVEY POINTS. GOOD SECONDARY ROADS. PHONE/NON-TAC RADIO AT
ALL RANGES AND TEST SITES. AUTODIN, FACSIMILE TELETYPE, PHOTOLAB AND MAINT
FOR MAJORITY OF EQUIP INCL ACFT DS/GS CALIBRATION SVCS. LIMITED ENGINEER
SUPPORT UHIA ACFT. AF SPT CAN BE ARRANGED. MET TEAM SUPPORT SUPPORT
AVAILABLE. INST FOR MOST ITEMS ON HAND, CAN OBTAIN OTHER INSTRUMENTS.
MOVING TARGET SYSTEM, REMOTE SARTS TARGET SYSTEM, E.O.D, STATISTICAL AND
MAINTENANCE EVALUATION CAPABILITIES AVAILABLE. ADEQUATE COMPUTER FACIL.

INSTALLATION: COMBAT SURVEILLANCE & TGT ACQUISITION LAB FT. MONMOUTH, N.J.

CDR. COL. WINSTON K. EVANS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	15.077	7.943
TOTAL PROCUREMENT	52.977	20.737
TOTAL O&M	0.763	0.027
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	68.817	28.707
TOTAL INHOUSE	7.882	3.781
TOTAL INHOUSE RDT&E	4.098	2.961
ANNUAL OPERATING COST	2.357	2.878

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	10	0	9	1
CIVILIAN	172	2	130	42
TOTAL	182	2	139	43

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
227	88.475	6.129	12.569	107.183	4.266	17.115

...MISSION

CONDUCT ALL PHASES OF R+D INCL INITIAL PRODUCTION IN THE FOLLOWING TECHNOLOGIES- IDENT FRIEND FOE NEUTRAL; DATA TRANSMISSION + PROCESSING; NUCLEAR RADIATION DETECTION + MEASUREMENT; RADAR; ACOUSTIC WEAPONS LOCATION; REMOTE SENSING; PHOTOGRAPHY; AND IMAGERY INTERPRETATION.

...CURRENT IMPORTANT PROGRAMS

PROCUREMENT OF MOBILE GROUND IMAGERY INTERPRETATION CENTER ABV MAGIIC
ADVANCED DEV OF BATTLEFIELD SURV + TARGET ACQUISITION RADAR ABV RSTAR
ADVANCED DEV OF NUCLEAR BURST DETECTION SYSTEM ABV NBDS
ADVANCED DEV OF BATTLEFIELD IDENT FRIEND OR FOE ABV BIFF
EXPLORATORY DEV OF VARIOUS CS+TA SENSORS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PHOTO PROCESSING, OPTICAL TEST LENS RESOLUTION TEST PATTERN FACILITIES, INCLUDING DARK ROOMS, CHEM LABS, RADAR TECHNIQUES DEVELOPMENT FACILITIES, INCLUDING MICROWAVE DARK ROOM, ANTENNA PATTERN + TEST RANGE, 65 FOOT RADAR TEST PLATFORM. OUTDOOR AND INDOOR RANGES INSTRUMENTED FROM 30 MHZ TO 70 GHZ. MOBILE SPECTRAL AND TIME DISTRIBUTION MEASUREMENT FACILITIES. RADAR INSTRUMENTATION FACILITY CAPABLE OF TRACKING X-BAND RADAR AND COLLECTING AND RECORDING POSITION, VELOCITY, AND SIGNAL STRENGTH, INCLUDING A SHORT RANGE SEARCH CAPABILITY.

FINDING, DESIGNATING, AND TRACKING SYSTEMS. RADAR INSTRUMENTATION FACILITY CAPABLE OF TRACKING X-BAND RADAR AND COLLECTING AND RECORDING POSITION, VELOCITY, AND SIGNAL STRENGTH, INCLUDING A SHORT RANGE SEARCH CAPABILITY.

INSTALLATION: COMMUNICATIONS - ELECTRONICS BOARD

FT.GORDON,GA.

PRES.COL.DONALD F. POE

ENGR.ADV.MR.JAMES H. LYLE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	0.346	1.260
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.019
TOTAL OTHER	0.042	1.234
TOTAL ANNUAL LAB	0.388	2.513
TOTAL INHOUSE	0.388	2.513
TOTAL INHOUSE RDT&E	0.346	1.260
ANNUAL OPERATING COST	0.077	0.472

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDJ	TOTAL PROF	NON- PROF
MILITARY	62	0	28	34
CIVILIAN	31	0	3	28
TOTAL	93	0	31	62

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
7	0.000	18.960	3.663	22.623	0.123	0.000

...MISSION

PLANS, CONDUCTS AND REPORTS ON OPERATIONAL TESTS OT I, II, AND III OF C-E SYSTEMS AND FORCE DEVELOPMENT TESTING AND EXPERIMENTATION AS PUBLISHED IN THE DA FIVE YEAR TEST PROGRAM. CONDUCTS CONCEPT EVALUATION PLANS AND OTHER USER-RELATED/CUSTOMER TEST DIRECTED BY TRADOC

...CURRENT IMPORTANT PROGRAMS

TACTICAL RECORD TRAFFIC TERMINAL AN/UGC-74 V 4 9-OTN-601
ARMY DATA DISTRIBUTION SYSTEM/PACKET RADIO EXPERIMENT CEP 8076
SHF GMF SATELLITE COMMUNICATIONS SYSTEM AN/TSC-85 V 2 AN/TSC-93 90TN-376
TRANSMISSION SYSTEM TEST 9-FO-183
JOINT SERVICES INTERIOR INTRUSION DETECTION SYSTEM OT II 9-OTN-487

...FUNCTIONS/EQUIPMENT/CAPABILITIES

SINCE THIS IS A NEWLY ORGANIZED ACTIVITY AND EQUIPMENT IS NOT AVAILABLE, NO STATEMENT CAN BE PROVIDED AT THIS TIME.

INSTALLATION: COMMUNICATIONS R & D COMMAND

FT MONMOUTH, N.J.

CDR.MG.HILLMAN DICKINSON

TECH.DIR.MR.THEODORE PFEIFFER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	35.205	39.043
TOTAL PROCUREMENT	2.512	5.188
TOTAL OEM	3.126	2.178
TOTAL OTHER	0.186	0.000
TOTAL ANNUAL LAB	41.029	46.409
TOTAL INHOUSE	7.119	7.208
TOTAL INHOUSE RDT&E	6.494	6.749
ANNUAL OPERATING COST	3.600	1.520

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	10	^	3	7
CIVILIAN	353	10	234	119
TOTAL	363	10	237	126

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
0	69.943	4.291	0.000	74.234	0.000	10.800

...MISSION

CONDUCT R&D RELATED TO COMMUNICATIONS EQUIPMENTS & SYSTEMS, INCLUDING FIELDS OF RADIO, TELEPHONIC, FACSIMILE AND DATA COMM, COMSEC AND COMM PROC CONDUCTED DIRECT TECH BASE R&D PROGRAMS IN TACTICAL ADP SYSTEMS AND COMPUTER SCIENCES. DEVELOP MULTI-APPLICATION TACTICAL ADP HARDWARE & SOFTWARE.

...CURRENT IMPORTANT PROGRAMS

FIBER OPTICS
ARMY DATA DISTRIBUTION SYSTEM
DIGITAL GROUP MULTIPLEXER
MILITARY COMPUTER FAMILY
INTELLIGENCE TERMINAL FAMILY

...FUNCTIONS/EQUIPMENT/CAPABILITIES

TELEPROCESSING DESIGN CENTER IS LAB EXPERIMENTAL FACILITY THAT SUPPORTS EXPERIMENTS WHICH ALLOW OPTIMUM DEVELOPMENT AND VALIDATION OF ARMY AND JOINT SERVICES TACTICAL DATA SYSTEMS CONFIGURATIONS. TDC HAS EMULATIONS OF ARTADS TACFIRE BATTALION SYSTEM, TOS, & TACFIRE-TOS AN/TSQ73 SUPPORT SOFTWARE SYSTEM. TDC HAS DEVELOPED EMULATIONS OF THE AN/UYK-15 AND AN/UYK-19 COMPUTERS IN SUPPORT OF FIREFINDER AND ATE DEVELOPMENT PROGRAM. THE COMMO SYSTEMS DESIGN CENTER (CSDC) IS AN INTEGRATED FACILITY CAPABLE OF INTER-OP, HARDWARE & SOFTWARE, VALIDATION AND VERIFICATION, & POST DEPLOYMENT SOFTWARE SUPPORT OF COMMO SYSTEMS FROM A SYSTEM VIEWPOINT. INCLUDED IN CSDC ARE THE AN/TTC-38 CKT SWITCH, THE AN/MYQ-2 TADS MESSAGE SWITCH, WITH APPLICABLE TERMINALS, TRANSMISSION MEDIA, MODEMS, AND SUPPORTING PERSONNEL.

INSTALLATION: CONSTRUCTION ENGINEERING RESEARCH LAB

CHAMPAIGN, IL.

CDR. COL. J.E. HAYS

TECH. DIR. DR. L.R. SHAFFER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	6.040	6.945
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	1.232	1.416
TOTAL OTHER	1.893	2.176
TOTAL ANNUAL LAB	9.165	10.537
TOTAL INHOUSE	7.553	8.684
TOTAL INHOUSE RDT&E	5.505	6.330
ANNUAL OPERATING COST	1.386	1.593

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PMDS	TOTAL PROF	NON- PROF
MILITARY	3	0	3	0
CIVILIAN	204	30	128	76
TOTAL	207	30	131	76

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN		OTHER	REAL PROP
30	76.081	34.159	0.000	110.240	3.896	4.067

...MISSION

PLAN, EXECUTE, AND EVALUATE RESEARCH TO OBTAIN THE BEST COMBINATION OF ENGINEERING, DESIGN, CONSTRUCTION, OPERATION & MAINTENANCE TO PROVIDE FACILITIES FOR THE MILITARY ESTABLISHMENT AND OTHER AGENCIES AT LEAST COST AND TO DISSEMINATE THE RESEARCH RESULTS.

...CURRENT IMPORTANT PROGRAMS

MATERIALS RESEARCH AND DEVELOPMENT FOR MILITARY CONSTRUCTION
ENVIRONMENT QUALITY FOR CONSTRUCTION & OPERATION OF MILITARY FACILITIES
DEVELOPMENT OF INDUSTRIALIZED CONSTRUCTION FOR MILITARY FACILITIES
DEVELOPMENT OF AUTOMATED PROCEDURES FOR MILITARY CONSTRUCTION
ARCHITECTURAL RESEARCH AND DEVELOPMENT FOR MILITARY FACILITIES

...FUNCTIONS/EQUIPMENT/CAPABILITIES

CONTROLLED ENVIRONMENT CHAMBER, ONE MILLION POUND CLOSED LOOP MATERIALS TEST SYSTEM, SCANNING ELECTRON MICROSCOPE, 5MW RESISTANCE LOAD BANK AND INSTRUMENTATION, X-RAY EQUIPMENT, SEMI-AUTOMATIC WELDING EQUIPMENT, BIAXIAL SHOCK TEST MACHINE, NON-DESTRUCTIVE TESTING FACILITY, VACUUM INDUCTION FURNACES, METALLOGRAPHIC SAMPLE PREPARATION AND RESEARCH METALLOGRAPH X-RAY DIFFRACTION AND VACUUM SPECTROSCOPY SYSTEM, DYNAMIC TENSION ANALYSIS SYSTEM, DIGITAL RECORDING ANALYSIS EQUIPMENT
FACILITIES CAPABILITIES INCLUDE SYSTEMS BUILDING METHODS AND TECHNIQUES, COMPUTER BASED DESIGN AND CONSTRUCTION MANAGEMENT TECHNIQUES, HARDENED FACILITIES ANALYSIS, ENVIRONMENTAL QUALITY MANAGEMENT, POLLUTION CONTROL AND ABATEMENT, MILITARY HOUSING SYSTEMS, POWER GENERATION SYSTEMS, UTILITIES SYSTEMS ANALYSIS AND EVALUATION, AND ARCHITECTURAL RESEARCH.

INSTALLATION: DUGWAY PROVING GROUND

DUGWAY,UT.

CDR.COL. JAMES R. KLUGH

SCI.DIR.DR. MORTIMER A. ROTHENBERG

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	18.082	16.548
TOTAL PROCUREMENT	0.465	0.047
TOTAL O&M	2.347	1.953
TOTAL OTHER	3.989	4.335
TOTAL ANNUAL LAB	24.883	22.883
TOTAL INHOUSE	23.197	21.782
TOTAL INHOUSE RDT&E	17.528	15.971
ANNUAL OPERATING COST	8.802	9.525

PERSONNEL	PERSONNEL DATA (END OF FY 1978)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	163	1	13		150
CIVILIAN	636	15	74		562
TOTAL	799	16	87		712

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
802731	90.728	191.558	1680.346	1962.632	79.999	28.762

...MISSION

DPG PLANS & CONDUCTS APPROVED TESTS TO ASSESS THE MILITARY VALUE OF CML WEAPONS, SMOKE/OBSCURANTS & CML-BIO DEF SYS. TESTS SPT R&D & PROVIDE BASIS FOR DEVELOPMENT OF NEW OPERATIONAL & LOGISTICAL CONCEPTS FOR EMPLOYMENT OF TESTED SYS. TESTS ARE RESPONSIVE TO USER REQUIREMENTS.

...CURRENT IMPORTANT PROGRAMS

CONDUCTS SERVICE DEV CML CML-BIO DEFENSE SMOKE/OBSCURANT TEST PROGRAMS
CONDUCTS R & D & LAB INVESTIGATIONS NECESSARY TO SUPPORT MISSION
CONDUCTS JT OP CML & CML-BIO DEFENSE TESTS/STUDIES FOR CINCS, SERVICES
CONDUCTS PROG TO SUP ARMY POLL ABATEMENT HAZARD EVAL & DEMIL OPNS
CONDUCTS ECOLOGICAL EPIDEMIOLOGICAL & TOXICOLOGICAL SURVL OF DPG AREA

...FUNCTIONS/EQUIPMENT/CAPABILITIES

INST GRIDS FOR CML CML-BIO TESTS; ARTY RG FOR CONVL & CML METAL PARTS, BALLISTIC & DISSEM TESTS; WITH FIELD SMPL, SMPL MASS ANAL, MET(AUTO DATA ACQ & MESOMET NETWK)SYS. TSPI(RADAR SLAVE PHOTO)SYS; PHYS & ENVIRON TEST FAC(MIL SPEC BIO) CHAMBERS FOR TOTAL AGENT CONTAINMENT; EXPLO SHIELDING PROPAGATION & OVERPRESSURE MEASMTS, OPNS SPTD BY MET RSCH ON BEHAVIOR OF CLOUDS; CML, LIFE SCI TECHN, ECOL SURVL OF DPG; CAPBL FOR PLANNING ANAL, EVAL OF TESTS, OPNS RSCH; LABS EQUIPD FOR WIDE ING OF CML, MICROBIOL, TOXICOL, IMMUNOL, ECOL, EPIDEMIO, POLL CNTL STUDIES; CAPBL FOR PROD BIO SIMUL AG; TECHN & MASS ASSAY OF FLUORESCENT AIR TRACERS; EXTENSV COMM & RG SAFETY SYS. OUTSTANDING ARE LARGE LAND AREA, RESTRICTED AIR SPACE, LONG & FLAT ARTY RANGES, PROJECTILE RECOVERY, SONIC & ELECTROMAG STERILITY, DIVERSE SKILLS.

INSTALLATION: ELECTRONIC PROVING GROUND

FT. HUACHUCA, AR.

CDR. COL. WILLIAM C. PETTY

CH. SCI. MR. GRADY H. BANISTER, JR

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + FST)
TOTAL RDT&E	7.868	8.396
TOTAL PROCUREMENT	1.316	1.406
TOTAL O&M	1.412	1.508
TOTAL OTHER	7.006	10.301
TOTAL ANNUAL LAB	17.602	21.611
TOTAL INHOUSE	15.465	19.315
TOTAL INHOUSE RDT&E	6.475	8.913
ANNUAL OPERATING COST	7.613	8.111

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	545	0	50	495
CIVILIAN	213	2	82	131
TOTAL	758	2	132	626

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
59573	0.000	50.300	169.500	219.800	2.350	99.400

...MISSION

PLAN, CDT, EVAL, REPT RESULTS OF DEV AND DEV-TYPE TESTS IAW INTGRD TESTING CYCLE PLCY FOR COMM-ELCT AND OPT/ELECTRO-OPT EQUIP AND SYS, TEMPEST AND OTHER MAT. OP FMFTF, ECM VULNERABILITY TEST FAC, AND STF. DEV/MAINT MASTER PLAN FOR DEV AND MODERNIZATION OF TEST INSTR, TEST FAC, TEST METHODOLOGY.

...CURRENT IMPORTANT PROGRAMS

COUNTER MORTAR RADAR
TRI-TAC MESSAGE SWITCH
GLOBAL POSITIONING SYSTEM
SINGLE CHANNEL GROUND TO AIR RADIO SYSTEM
AIR-GROUND TACTICAL EMITTER LOCATION SYSTEM

...FUNCTIONS/EQUIPMENT/CAPABILITIES

COMD USAFLCT PG. CONDUCT DEV AND DEV-TYPE TESTS IAW INTGRD TESTING CYCLE FOR FOL TYPES MATERIEL, COMM-ELCT AND OPTICAL/ELECTRO-OPT EQUIP AND SYS, TEMPEST, AND OTHER MATERIEL AS DIRECTED. MAINT CAPABILITY FOR ELECTRO-MAGNETIC COMPATIBILITY AND ELECTRONIC COUNTERMEASURES TEST ANALYSES. OPERATE AND MAINTAIN THE INSTRUMENTATION AND FACILITIES TO PROVIDE NECESSARY CAPABILITY. MAINTAIN CAPABILITY FOR CONDUCT OF TEMPEST TESTS AND ANALYSES DURING RESEARCH, DEVELOPMENT, TESTS AND EVALUATION CYCLES. CONDUCT OR PARTICIPATE IN FIELD RESEARCH AND RELATED STUDIES FOR DOD AGENCIES AS DIRECTED. DEVELOP AND MAINTAIN MASTER PLAN FOR THE DEVELOPMENT AND MODERNIZATION OF TEST INSTRUMENTATION, TEST FACILITIES, TEST METHODOLOGY AND TEST EXPERTISE NECESSARY TO SUPPORT ARMY MATERIEL DEVELOPMENT.

INSTALLATION: ELECTRONIC WARFARE LABORATORY

FT. MONMOUTH, N.J.

DIR. MR. CLYDE D. HARDIN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	34.973	34.830
TOTAL PROCUREMENT	57.988	63.721
TOTAL OEM	3.701	4.017
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	96.662	102.568
TOTAL INHOUSE	22.427	26.471
TOTAL INHOUSE RDT&E	16.710	16.719
ANNUAL OPERATING COST	2.225	2.489

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	58	1	6	52
CIVILIAN	412	8	224	188
TOTAL	470	9	230	240

ACRES	SPACE AND PROPERTY				COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP	
	LAB	ADMIN	OTHER				
0	142.936	13.617	48.502	205.055	0.000	86.420	

...MISSION

QRC READINESS.

ENGR SPT TO READINESS MGRS IN MISSION AREAS.

EWLAB IS LEAD LAB FOR EW TECH, HF TRU MM, IR TRU UV.

RESCH AND DEV ESSENTIAL TO EW AND SELECTED AREAS OF INTEL.

...CURRENT IMPORTANT PROGRAMS

EW/SIGINT: R&D/PRODUCTION OF SIG/INT EW EQUIPMENT

ELECTROMAGNETIC SYS FOR PENETRATION AID, ELECTROMAGNETIC CMS AND CCMS

VULN RED ECMS OF US ECMS SYS SO US FORCES CAN OPR IN DCN SIGINT ENVIR

FOCAL PT FOR ARMY ECMS/CCMS DEV AND ASSESSMENT ACTIVITIES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

ENCOMPASSES APPLD RDA INCL QRC DEV AND SPT IN INTEREPT, DF, SIG ANALYSIS.

JAM DECEPT SIG INTEL, ACQST INTEL CNTR INTEL VULN AND COUNTER COUNTERMEAS

TECHNICAL FACILITIES: BIG CROW (KC-135), AIRBORNE EW LABORATORY, IRCH.

SIMULATOR (US AND FOREIGN MISSILES), IR MEASUREMENTS AND DATA REDUCTION.

ISMS ISIS MRL INSTR FAC IMDSO PHOTO PHYS SEC FAC EW INFO SYSTEM

(QRC DATA BASE), WAYSIDE TEST AREA (HF, VHF, DF, JONOSONDE), ANTENNA RANGE.

FAC DF ANT PAT SANDY HOOK (ELINT) MEAS ANECHOIC CHAMB MICROWAVE ANT MEAS

ELECTRONICALLY SECURE LABORATORY AREA.

INSTALLATION: ELECTRONICS R & D TECH SUPPORT ACTIVITY

FT. MONMOUTH, N.J.

CDR. COL. F. L. BOWMAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	5.248	5.459
TOTAL PROCUREMENT	0.486	0.506
TOTAL O&M	0.351	0.380
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	6.085	6.345
TOTAL INHOUSE	6.085	6.345
TOTAL INHOUSE RDT&E	5.248	5.459
ANNUAL OPERATING COST	5.264	4.455

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	6	0	1	5
CIVILIAN	244	0	37	207
TOTAL	250	0	38	212

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
136	17.826	34.599	71.415	129.840	33.988	6.821

...MISSION

PROVIDE ENGINEERING SUPPORT AND SHOP SERVICES TO FACILITATE THE CONDUCT OF RESEARCH AND DEVELOPMENT BY THE SEVERAL LABS PROJECT MANAGERS OTHER SUBORDINATE COMMANDS CORPORATE LABORATORIES AS WELL AS OTHER SERVICES

...CURRENT IMPORTANT PROGRAMS

COUNTER BATTERY RADAR
QUICK LOOK 1
SINGARS
QUICK FIX 1
CEFLY LANCER

...FUNCTIONS/EQUIPMENT/CAPABILITIES

ENVIRONMENTAL EVALUATION FACILITY PROVIDE ENVIRONMENTAL TEST ON ARMY ELECTRONIC EQUIP THRU THE USE OF CLIMATIC CHAMBERS, MRC200 VIBRATION MACHINES AND SHOCK MACHINE METROLOGY AND CALIBRATION FACILITY, TIME DATA ACQUISITION AND CALIBRATION SYSTEM, HP9600 PROVIDE CHARACTERIZATION OF ELECTRIC EQUIP OVER FREQUENCY RANGES, CALIBRATION CAPABILITY FOR VOLTAGE CURRENT RESISTANCE RADIO FREQ MICRO-WAVE PWR FREQUENCY AND TEMP ELECTROMAGNETIC INTERFERENCE TEST FACILITY, MECHANICAL DATA REDUCTION AND ANALYSIS FACILITY PROVIDES ANALYSIS OF DATA FROM ENVIRONMENTAL TEST USING AN ORTHOLOG ANALYZER OR SAIO COMPUTER AIDED DESIGN AND MANUFACTURING DRAFTING SERVICES AND ALL TYPES OF SHOP SERVICES,

INSTALLATION: ELECTRONICS TECHNOLOGY AND DEVICES LAB

FT. MONMOUTH, N.J.

TECH. DIR. DR. C.G. THORNTON

DEP. DIR. MR. S. DANKO

PROGRAM DATA BY FISCAL YEAR (MILLION \$)

PROGRAM	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	20.645	21.353
TOTAL PROCUREMENT	0.035	4.275
TOTAL O&M	0.051	0.494
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	20.731	26.122
TOTAL INHOUSE	13.250	13.129
TOTAL INHOUSE RDT&E	13.164	12.233
ANNUAL OPERATING COST	0.000	0.000

PERSONNEL DATA (END OF FY 1978)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	0	0	0	0
CIVILIAN	250	32	171	109
TOTAL	250	32	171	109

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
0	95.789	10.575	26.474	132.838	0.000	10.880

...MISSION

TO DEVELOP AN ESSENTIAL BASE IN ELECTRONICS TECHNOLOGY AND DEVICES CONSISTENT WITH NEXT GENERATION ARMY SYSTEM OPERATIONAL REQUIREMENTS. TO THIS END, AN APPLIED R&D PROGRAM IS PURSUED, FOCUSING ON CRITICAL BARRIER DEVICE AND MATERIAL PROBLEMS THAT INHIBIT DEVELOPMENT OF NEW ARMY SYSTEMS.

...CURRENT IMPORTANT PROGRAMS

HIGH SPEED SIGNAL PROCESSING DEVICES FOR REAL TIME IDENT & LOCATION OF ENEMY EQUIPMENT & WEAPONS. WIDE BAND EFF JAMMING DEVICES, DECOY COMPONENTS FOR OPERATION FROM EXPENDABLE AB PLATFORMS. MICROWAVE MM-WAVE DEVICES FOR LOCATION IDENT DESTRUCTION OF TARGETS THRU SMOKE INCLEMENT WEATHER. LIGHT WEIGHT PORTABLE POWER FOR FIELD ARMY. HI-PWR PULSERS FOR LASERS/WEAPONS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

FACILITIES ARE AVAILABLE FOR PERFORMING R&D ON PREPARATION, PROPERTIES & CONTROL OF ELECTRONIC MATERIALS FOR CONDUCTING R&D ON ELECTRONIC PARTS, DEVICES, INTEGRATED CIRCUITS AND ASSEMBLIES. LABORATORIES FOR PERFORMING R&D IN THESE AREAS ARE EQUIPPED WITH THE NORMAL ARRAY OF STD LABORATORY INSTRUMENTATION AND FACILITIES. LABORATORY WORK AREAS INCLUDE FACILITIES FOR THE COMPLETE DESIGN, FABRICATION AND TESTING OF IC'S, HYBRID CIRCUITS ASSEMBLIES, SEMICONDUCTOR DEVICES, QUARTZ CRYSTALS, MICROWAVE AND MM-WAVE DEVICES AND CIRCUITS, ELECTRON TUBES AND DISPLAY DEVICES. ALSO FACILITIES FOR PRIMARY, SECONDARY & SPECIFIC PURPOSE POWER SOURCES, ELECTROCHEMICAL RESEARCH, CHARACTERIZATION OF ELECTRONIC MATERIALS. THE LAB ALSO PROVIDES ARMY CUSTOMERS WITH EXPERT SERVICES INCLUDING DIRECT R&D DEVELOPMENT, SUPPORT, CONSULTATION AND DIRECT PARTICIPATION IN SYSTEMS DEVELOPMENT.

INSTALLATION: ENGINEER TOPOGRAPHIC LABORATORIES

FT. BELVOIR, VA.

CDR. COL. DANIEL L. LYCAN

TECH. DIR. MR. R. P. MACCHIA

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MYLLION \$)	
	1978	1979
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	24.344	20.478
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	1.835	2.209
TOTAL OTHER	0.226	0.275
TOTAL ANNUAL LAB	26.405	22.962
TOTAL INHOUSE	10.363	10.266
TOTAL INHOUSE RDT&E	8.993	8.845
ANNUAL OPERATING COST	2.384	2.600

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	16	1	9	7
CIVILIAN	269	19	178	91
TOTAL	285	20	187	98

ACRES	SPACE AND PROPERTY				COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP	
33	90.722	7.000	13.300	111.022	6.000	10.600	

...MISSION

ACCOMPLISHES RESEARCH AND DEVELOPMENT OF SYSTEMS, EQUIPMENT, PROCEDURES AND TECHNIQUES APPLICABLE TO MAPPING, SURVEYING, GEODESY, PHOTO-INTERPRETATION AND MILITARY GEOGRAPHIC INFORMATION RELEVANT TO MILITARY OPERATIONS AND MATERIEL DEVELOPMENT.

...CURRENT IMPORTANT PROGRAMS

SUPPORT TO PERSHINGII
TOPOGRAPHIC SUPPORT SYSTEM
POSITION AND AZIMUTH DETERMINING SYSTEM
QUICK RESPONSE MULTICOLOR PRINTER
EXPERIMENTAL DIGITAL INTERACTIVE FACILITY

...FUNCTIONS/EQUIPMENT/CAPABILITIES

FACILITIES INCLUDE A CARTOGRAPHIC LABORATORY TO STUDY THE PROBLEMS ASSOCIATED WITH HANDLING DIGITAL CARTOGRAPHIC DATA, A DIGITAL IMAGE PROCESSING LABORATORY TO STUDY THE MANIPULATION AND ENHANCEMENT OF TERRAIN IMAGERY FOR OBTAINING MAPPING AND GEOGRAPHIC DATA, AND A COHERENT OPTICS LABORATORY FOR DETERMINING THE POTENTIAL OF COHERENT OPTICS FOR TOPOGRAPHIC DATA PROCESSING. COMPUTATIONAL EQUIPMENT INCLUDES THE CDC 6400, GOODYEAR STARAN S-1000 AND DEC PDP 11/50. OTHER SPECIALIZED EQUIPMENT INCLUDE A COMTAL, DICOMED, PDS DIGITAL AUTOMATED MICRODENSITOMETER, A RECORDING OPTICAL SPECTRUM ANALYZER, POCKELS READOUT OPTICAL MODULAR, COLOR AND MULTIBAND AERIAL CAMERAS, PRECISION MENSURATION EQUIPMENT, AND A COHERENT RADAR SIGNAL PROCESSOR.

INSTALLATION: ENGINEER WATERWAYS EXPERIMENT STATION

VICKSBURG, MS.

DIR. COL. JOHN L. CANNON

TECH. DIR. MR. F. R. BROWN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RD&E	14.504	15.720
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.249	0.260
TOTAL OTHER	41.032	45.405
TOTAL ANNUAL LAB	55.785	61.385
TOTAL INHOUSE	44.484	49.100
TOTAL INHOUSE RD&E	12.797	13.370
ANNUAL OPERATING COST	7.695	8.442

PERSONNEL	PERSONNEL DATA (END OF FY 1973)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	37	2	31	6
CIVILIAN	1375	79	465	910
TOTAL	1412	81	496	916

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
722	1736.714	359.819	172.439	2268.972	20.240	34.127

...MISSION

MIL&CIV FUNDED RSCH, DEV&INVS IN HYD, ECOLOGY, PERM&EXPEDIENT PAVEMENTS, SOIL, CONCRETE, EXPLO WPN EFF, EXPLO EXCAVATION, VEH MOBILITY&ENVIRONMENTAL ASPECTS OF MIL OPERATIONS. OPERATE TECH LIBRARY&GOVERNMENT CEMENT&POZZO-LAW TEST PROGRAM. SERVES CE, DARCOM, DNA, DOE, AF, NAVY, EPA & OTHER AGENCIES.

...CURRENT IMPORTANT PROGRAMS

HYD&MATH MODELING TO SOLVE RIVER, TIDAL, WIND-WAVE, ECOLOGICAL&STRUC PROBS. RSCH ON VEH MOBILITY, REMOTE SENSING, ENVIR IMPACTS, & EARTHQUAKE DSGN CRIT. NUCLER RSCH TO DEV CRIT FOR ED OF PROTECTIVE STRUC, BARRIERS&EXCAVATIONS. RSCH, DEV&FORMULATION OF NEW&IMP ENG CRIT ON ROADS, STOR AREAS, AIRFIELDS, INVS OF CEMENTITIOUS MATERIALS AND RSCH OF MASS AND STRUCTURAL CONCRETE

...FUNCTIONS/EQUIPMENT/CAPABILITIES

CAPABLE OF PERFORM GEN INVS IN FLD OF HYD, SOIL MECH, CONCRETE, MOBILITY OF MIL VEH, EXPLO EFF, ECOLOGY&EXPLO EXCAVATION AND DEV OF STRUC & PAVEMENTS DSGN CRIT. THRU RE&APPLIED RSCH, THE CAPABILITY OF DEV METHODS&TECH AND THE TESTING OF MAT&EQUIP IS EXERCISED TO ASST IN ACCOMPLISHMENT OF THE CE MSN. WES RESERVATION CNTN BLDGS, TEST SITES, SPECIAL EQUIP&OTHER PLANT FAC. TEST SITES&FAC FOR SP PURPOSES ARE MAINT IN OTHER AREAS ON PERM OR TEMP BASIS. FAC INCL FLUMES OF DIFF TYPES&SIZES, WAVE&TIDE GENR MACH, DRILL EQUIP, FULLY EQUIPED SOILS, CONCRETE, CHEMISTRY, CALBR, ELCT&TEMPERATURE CON ENVIRONMENTAL MODEL LABS, X-RAY DIFFRACTION&SPECTROSCOPY APPAR, LARGE AND SMALL BLAST LOAD GENERATOR, 200K DYNAMIC LOADER, MOBILITY RSCH FAC, SINGLE AND MULTIPLE WHEEL LOAD CRTS, SUR EFF BLAST FAC, HIGH&LOW FREQ VIBRATORS, ELECTRON MICROSCOPE, LARGE SCALE CMPT FAC AND TECH LIBRARY.

INSTALLATION: FIELD ARTILLERY BOARD

FT.SILL,OK.

PRES.COL. M.J. KINNE, JR.

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	1.056	1.367
TOTAL PROCUREMENT	0.038	0.312
TOTAL OEM	0.021	0.017
TOTAL OTHER	2.331	2.516
TOTAL ANNUAL LAB	3.446	4.212
TOTAL INHOUSE	3.446	4.212
TOTAL INHOUSE RDT&E	1.056	1.367
ANNUAL OPERATING COST	0.249	0.245

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	152	0	34	118
CIVILIAN	35	0	4	31
TOTAL	187	0	38	149

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
23	22.566	32.802	17.640	73.008	3.330	0.842

...MISSION

PLAN CONDUCT AND REPORT ON OT I OT II AND OTHER USER-TYPE TESTS
 PARTICIPATE IN DT I AND DT II AS DIRECTED
 PROVIDE ADVICE TO PROPONENT AGENCIES AND DEVELOPERS
 CONDUCT OTHER TESTS AND EVALUATIONS AS DIRECTED BY TRADOC

...CURRENT IMPORTANT PROGRAMS

OPERATIONAL TEST II XM736
 OPERATIONAL TEST II SMALL UNIT TRANSCEIVERS
 OPERATIONAL TEST II TRAINER RADAR TPQ36
 OPERATIONAL TEST II XM753
 OPERATIONAL TEST II BCS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

ONE MET STATION
 TEST ITEMS ADDITIONAL SUPPORT IS OBTAINED FROM USAFACFS WHEN NEEDED

INSTALLATION: FIRE CONTROL & SMALL CAL. WPNS SYSTS LAB DOVER, N.J.

CDR. COL. AARON LARKING

DEP. DIR. DR. DONALD GYOROG

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	21.952	22.269
TOTAL PROCUREMENT	6.689	9.094
TOTAL OEM	17.078	0.200
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	45.719	31.563
TOTAL INHOUSE	28.983	20.066
TOTAL INHOUSE RDT&E	11.264	12.522
ANNUAL OPERATING COST	9.413	10.553

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	15	0	13	2
CIVILIAN	608	20	347	261
TOTAL	623	20	360	263

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)				REAL	PROP
	LAB	ADMIN	OTHER			EQUIP
0	0.000	0.000	0.000	0.000	0.000	0.000

...MISSION

ACCOMPLISH EXPLORATORY, ADVANCED AND ENGINEERING DEVELOPMENT AND LIFE CYCLE TECHNICAL RESPONSIBILITY FOR FIRE CONTROL AND ALL WEAPON SYSTEMS AND ANCILLARY ITEMS THROUGH 40MM. FIRE CONTROL RESPONSIBILITY INCLUDES ALL COMBAT VEHICLES, FIELD ARTILLERY, HELICOPTERS, AIR DEFENSE & INFANTRY

...CURRENT IMPORTANT PROGRAMS

FIRE CONTROL AND SMALL CALIBER ARMAMENT TECHNOLOGY
SQUAD AUTOMATIC WEAPON
MORTAR FIRE CONTROL CALCULATOR
NATO SMALL ARMS FIELD EVALUATION
FIRING PORT WEAPON XM231 FOR INFANTRY FIGHTING VEHICLE

...FUNCTIONS/EQUIPMENT/CAPABILITIES

THE LABORATORY CONDUCTS RESEARCH, EXPLORATORY, ADVANCED AND ENGINEERING DEVELOPMENT IN GUN FIRE CONTROL AND SMALL CALIBER WEAPON SYSTEMS. IT MAINTAINS TEST BED FACILITIES WHICH PERMIT EVALUATION OF SYSTEMS IN THE COMMODITY AREAS OF FIRE CONTROL, AIR DEFENSE AND COMBAT VEHICLES. THE LAB HAS THE CAPABILITY FOR DESIGN AND EVALUATION OF OPTICAL SYSTEMS, MATERIALS AND SIGHTING DEVICES, DIGITAL AND ANALOG SIGNAL PROCESSORS AND GUN/TURRET STABILIZATION AND CONTROL SYSTEMS, SMALL CALIBER WEAPONS, WEAPON MECHANISMS AND MOUNTS, PROJECTILES, PENETRATORS, SHAPED CHARGE LINERS, PROPELLANTS, PRIMERS AND CARTRIDGE CASES.

SPACE & PROPERTY DATA NOT SHOWN. INCLUDED UNDER LARGE CALIBER WEAPONS SYSTEM LAB.

INSTALLATION: HARRY DIAMOND LABORATORIES

WASHINGTON, D.C.

CDR. COL. CLIFTON R. GOODWIN

TECH. DIR. WILLIAM W. CARTER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	69.028	56.643
TOTAL PROCUREMENT	53.533	51.575
TOTAL O&M	2.228	1.578
TOTAL OTHER	1.981	3.835
TOTAL ANNUAL LAB	126.770	113.626
TOTAL INHOUSE	41.250	42.464
TOTAL INHOUSE RDT&E	30.368	30.134
ANNUAL OPERATING COST	13.518	13.231

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	6	2	5	1
CIVILIAN	1194	58	803	391
TOTAL	1200	60	808	392

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)				COST (MILLION \$)	
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
2343	405.382	70.732	272.541	748.655	47.594	39.768

...MISSION

MISSION: ELECTRONIC FUZES, NUCLEAR WEAPONS EFFECTS TECHNOLOGY, SPECIAL RADAR COMPONENTS AND SYSTEMS, ELECTRONICS TECHNOLOGY, COMPONENTS, AND CIRCUITS, FLUIDIC COMPONENTS AND SYSTEMS, ELECTRO-OPTICAL DEVICES, SELECTED INSTRUMENTATION/SIMULATORS, COUNTERMEASURES (CM) AND COUNTER-CM

...CURRENT IMPORTANT PROGRAMS

CURRENT SIGNIFICANT PROGRAMS: R&D OF XM818E1 FUZE FOR PATRIOT MISSILE, NUCLEAR WEAPONS EFFECTS RESEARCH AND TECHNOLOGY, R&D AND PRODUCTION SUPPORT FOR XM749 AND M735 FUZES FOR NUC. ARTILLERY, R&D AND PRODUCTION SUPPORT FOR XM741 AND M734 FUZES FOR MORTAR, R&D OF XM445 FUZE FOR GENERAL SUPPORT ROCKET SYSTEM.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

MAJOR EQUIPMENT AND FACILITIES:

NUCLEAR FACILITIES: GAMMA-RAY SIMULATION (AURORA), HIGH-INTENSITY FLASH X-RAY (HIFX), COBALT-60, AND ELECTROMAGNETIC PULSE SIMULATORS. ELECTRONIC DESIGN FACILITIES: THICK-FILM HYBRID CIRCUIT FACILITIES, MICROWAVE ANECHOIC CHAMBER, AND GAITHERSBURG RESEARCH FACILITY. FUZING FACILITIES: ARTILLERY SIMULATOR, ENVIRONMENTAL TESTING, BLOSSOM POINT TEST FACILITY, AND MAGNETIC SIGNATURE FACILITY.

INSTALLATION: HUMAN ENGINEERING LABORATORY

ABERDEEN PRO.GR.,M

DIR.GR. JOHN D. WEISZ

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + FST)
TOTAL ROT&E	7.772	7.750
TOTAL PROCUREMENT	0.075	0.050
TOTAL O&M	0.297	0.371
TOTAL OTHER	0.412	0.435
TOTAL ANNUAL LAB	8.556	8.606
TOTAL INHOUSE	7.033	7.531
TOTAL INHOUSE ROT&E	6.249	6.675
ANNUAL OPERATING COST	3.111	3.312

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	33	1	13	20
CIVILIAN	142	16	106	36
TOTAL	175	17	119	56

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
12	22.000	25.800	29.000	76.800	4.412	3.806

...MISSION

CONDUCTS FUNDAMENTAL AND APPLIED RESEARCH IN HUMAN FACTORS ENGINEERING. PROVIDES DIRECT DESIGN SUPPORT TO ALL MATERIEL DEVELOPMENT PROGRAMS SPONSORED BY DARCOM. FOURTEEN DETACHMENTS AND/OR LIAISON REPRESENTATIVES HAVE BEEN ESTABLISHED AT DARCOM COMMANDS, CRTC AND TRADOC CTRS/SCHOOLS.

...CURRENT IMPORTANT PROGRAMS

HELBAT VII - MAJOR ARTILLERY FIELD TRIAL
FEMALE SOLDIER PERFORMANCE IN COMBAT LIKE TASKS
UP-GRADING THE AMMUNITION RESUPPLY PROCESS
DETERMINE WEAKNESSES IN "SPARE PARTS" ORDERING
HUMAN FACTORS ENG IN SPT OF ALL MATERIEL BEING DEVELOPED BY DARCOM

...FUNCTIONS/EQUIPMENT/CAPABILITIES

DATA ACQUISITION AND BIOTELEMETRY SYSTEM
GAT 2M HELICOPTER SIMULATOR
COMMAND CONTROL SIMULATOR SYS AND TEST FACILITY
ACOUSTICAL RSCH ANECHOIC CHAMBER REVERBERANT ROOM
LONG RANGE POSITIONED DETERMINING SYSTEM
INSTRUMENTED PHYSICAL ENDURANCE COURSE
EYE MOVEMENT MEASURING DEVICE
SMALL ARMS TEST FIRING RANGE
NOISE MEASUREMENT AND ANALYSIS INSTRUMENTATION
WOOD AND METAL WORKING TEST SUPPORT CAPABILITIES
HUMAN PERFORMANCE DATA BANK
ARMOR TEST SITE

INSTALLATION: INFANTRY BOARD

FT. BENNING, GA.

PRES. COL. JAMES P. LEIGHTON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + FST)
TOTAL RDT&E	1.589	1.758
TOTAL PROCUREMENT	0.074	0.329
TOTAL OSM	0.012	0.000
TOTAL OTHER	1.573	1.948
TOTAL ANNUAL LAB	3.248	4.035
TOTAL INHOUSE	3.248	4.035
TOTAL INHOUSE RDT&E	1.589	1.758
ANNUAL OPERATING COST	0.905	0.990

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	124	0	10	114
CIVILIAN	55	0	5	50
TOTAL	179	0	15	164

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
10	0.000	35.653	31.089	66.742	0.900	0.779

...MISSION

PLAN CONDUCT REPORT ON OPERATIONAL TESTS 1/2/3, FORCE DEVELOPMENT TESTS & OTHER TESTS OF EQUIPMENT & ANCILLARY ITEMS TO BE USED BY INFANTRY UNITS FOR COMMAND & CONTROL, FIREPOWER, TARGET ACQUISITION, GROUND SURVEILLANCE, FIRE CONTROL, GROUND MOBILITY & TRAINING.

...CURRENT IMPORTANT PROGRAMS

INFANTRY REMOTE TARGET SYSTEM (IRETS)
MARKSMANSHIP & GUNNERY LASER DEVICE (MAGLAD)
VIPER OT 11
SQUAD AUTOMATIC WEAPON (SAW OT/A)
HIGH MOBILITY WEAPONS CARRIER

...FUNCTIONS/EQUIPMENT/CAPABILITIES

CHEMICAL WARFARE-BIOLOGICAL
WARFARE EQUIPMENT FOR INDIVIDUALS. PARTICIPATE IN DEVELOPMENT TESTS 1/2/3. PROVIDE ADVICE TO PROPOSING AGENCIES AND MATERIEL DEVELOPERS ON EQUIPMENT WHICH IS EITHER USED BY OR PROVIDES SUPPORT TO INFANTRYMEN. DATA AND INFORMATION DERIVED DIRECTLY FROM TEST EXPERIENCE WILL PROVIDE THE BASIS FOR SUCH ADVICE. CONDUCT OTHER TESTS AND EVALUATIONS AS DIRECTED BY COMMANDER TRADOC.

INSTALLATION: INSTITUTE OF DENTAL RESEARCH

WASHINGTON, D.C.

CDR. COL. DUANE E. CUTRIGHT

TECH. DIR. DR. GINO BATTISTONE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	2.019	2.408
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.146	0.152
TOTAL OTHER	1.160	1.171
TOTAL ANNUAL LAB	3.325	3.731
TOTAL INHOUSE	2.363	2.671
TOTAL INHOUSE RDT&E	1.057	1.348
ANNUAL OPERATING COST	0.450	0.584

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	63	5	47	16
CIVILIAN	26	2	10	16
TOTAL	89	7	57	32

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
4	9.325	5.698	6.730	21.751	0.853	1.130

...MISSION

DEVELOP TECHNIQUES TO TREAT WAR RELATED MAXILLOFACIAL INJURIES AND DENTOF DFEASE. PEVENTION AND CONTROL OF DENTAL DFEASE.
PROVIDE DENTAL RESIDENCY PROGRAMS.

...CURRENT IMPORTANT PROGRAMS

BIODEGRADABLE MATERIALS FOR LONG TERM SLOW RELEASE AND ORGAN REPLACEMENT
USE OF SALIVA FOR DETECTING EXPOSURE TO CHEMICAL AGENTS IN THE FIELD
R&D OF NEW AND IMPROVED DENTAL MATERIALS FOR MILITARY USFAGE WORLD-WIDE
STUDIES ON METHODS OF IMPROVING COMBAT CONTAMINATED WOUND HEALING
STUDIES FOR IMPROVING METHODS OF CONTROLLING INFECTIONS IN COMBAT WOUNDS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

DETERMINE PHYSICAL CHEMICAL AND MECHANICAL PROPERTIES OF METALS, ALLOYS, CERAMICS, PLASTICS, AND POLYMERS, TO INCLUDE STRESS TESTING AND ELECTRON MICROSCOPE EVALUATION. CONDUCT EXPERIMENTAL RESEARCH IN MICROBIOLOGY, BIOCHEMISTRY, IMMUNOLOGY, RADIATION MEDICINE, AND PHARMACOLOGY. TEST AND EVALUATE ANY FACET OF CLINICAL DENTISTRY, TO INCLUDE CLINICAL AND LABORATORY TECHNIQUES. PREPARE AND ANALYZE HISTOPATHOLOGIC SPECIMENS AND PERFORM DIFFERENTIAL DIAGNOSTIC EVALUATION ON THEM. PERFORM MOST FACETS OF ANIMAL SURGERY REQUIRED TO SUPPORT RESEARCH EFFORT.

INSTALLATION: INSTITUTE OF SURGICAL RESEARCH

FT. SAM HOUSTON, TX.

CDR. DIR. COL. BASIL A. PRUITT, JR.

CH. SCI. DR. ARTHUR D. MASON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RD&E	2.008	2.062
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	2.108	2.300
TOTAL ANNUAL LAB	4.116	4.362
TOTAL INHOUSE	4.116	4.362
TOTAL INHOUSE RD&E	2.008	2.062
ANNUAL OPERATING COST	0.819	0.826

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	134	16	18	116
CIVILIAN	80	6	19	61
TOTAL	214	22	37	177

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1	26.424	1.800	22.408	50.632	2.013	1.908

...MISSION

CONDUCTS BASIC AND CLINICAL RESEARCH ON SEVERE BURN INJURIES AND THEIR COMPLICATIONS. PROVIDES TREATMENT FOR BURNED PATIENTS AND TRAINS SPECIFIED PERSONNEL IN THE TOTAL MANAGEMENT OF SUCH PATIENTS. OPERATES 40 BEDS FOR HOSPITALIZATION OF SERIOUSLY INJURED BURN PATIENTS.

...CURRENT IMPORTANT PROGRAMS

DIAGNOSIS TREATMENT AND PREVENTION OF INFECTION IN BURN PATIENTS
METABOLIC RESPONSE TO INJURY
HEMODYNAMIC RESPONSE TO INJURY
HOST DEFENSE IMPAIRMENT AFTER BURN INJURY
DIAGNOSIS AND TREATMENT OF PULMONARY COMPLICATIONS IN BURN PATIENTS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PROVIDES CLINICAL AND LABORATORY SUPPORT AND RESEARCH CAPABILITY IN THE FIELDS OF PATHOLOGY, INCLUDING USE OF ELECTRON MICROSCOPE, MICROBIOLOGY, EXPERIMENTAL SURGERY, PHYSIOLOGY, AND BIOCHEMISTRY. MAINTAINS AN ANIMAL COLONY, ELECTRONIC SHOP, SURGICAL LIBRARY, METABOLIC CHAMBER, AND COMPUTER FACILITY.

INSTALLATION: INTELLIGENCE & SECURITY BOARD

FT HUACHUCA, AR.

PRES. COL. DWANE F. PINS

TECH. DIR. MR. PHILLIP E. WRALSTAD

PROGRAM DATA BY FISCAL YEAR (MILLION \$)

PROGRAM	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	1.091	2.842
TOTAL PROCUREMENT	0.117	0.152
TOTAL DEM	0.000	0.000
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	1.208	2.994
TOTAL INHOUSE	0.398	1.107
TOTAL INHOUSE RDT&E	0.381	1.107
ANNUAL OPERATING COST	0.364	0.428

PERSONNEL DATA (END OF FY 1978)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	100	0	46	54
CIVILIAN	18	2	8	10
TOTAL	118	2	54	64

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)	COST (MILLION \$)				
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
10	0.000	5.000	23.000	28.000	0.250	0.749

...MISSION

PLAN, CONDUCT AND REPORT ON OT I, OT II, OT IIA, AND OTHER USER TYPE TESTS OF TACTICAL INTELLIGENCE AND SECURITY MATERIAL. PROVIDE ADVICE ON TEST AND EVAL MATTERS TO MATERIAL DEVELOPERS, PRODUCERS, OTHER SERVICES AND PRIVATE INDUSTRY. CONDUCTS TEST AND EVAL AS DIRECTED BY CDR, TRADOC.

...CURRENT IMPORTANT PROGRAMS

MULTIPLE TARGET ELECTRONIC WARFARE SYSTEM AN/ALQ 143
AUTOMATIC GROUND TRANSPORTABLE EMITTER LOCATOR AND IDENTIFICATION SYSTEM
COUNTERMEASURES SYSTEM SPECIAL PURPOSE AN/ARQ 33.
TACTICAL JAMMER AN/MLQ 34.
EW COMPANY SIMULATOR.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

ELECTRONIC WARFARE MONITORING FACILITY (EWMF)-TRANSPORTABLE- HOUSED IN 30FT ELECTRONIC VAN WITH FOLLOWING CAPABILITY: RECEIVERS 10KHZ-26GHZ, ANTENNAS 30MHZ-40GHZ, TAPE RECORDERS, SPECTRUM ANALYZERS, OSCILLOSCOPES. REQUIRES 5 TON TRACTOR FOR TOWING. OTHER FACILITIES INCLUDE OVER 70000 ACRES AT FT HUACHUCA, 23000 ACRES AT WILCOX DRY LAKE, AND 1505000 ACRES AT GILA BEND (UPON REQUEST) THAT CAN BE USED AS RANGES FOR OPERATIONAL TESTING OF INTEL/EW SYSTEMS.

INSTALLATION: KWAJALEIN MISSILE RANGE, MARSHALL ISLANDS

APO SAN FRANCISCO

DIR.COL. R.A. PARSONS

DEP.DIR.COL. O.E. OVA

PROGRAM DATA BY FISCAL YEAR (MILLION \$)

PROGRAM	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	95.221	105.759
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	3.428	7.816
TOTAL ANNUAL LAB	98.649	113.575
TOTAL INHOUSE	5.428	5.720
TOTAL INHOUSE RDT&E	4.603	4.850
ANNUAL OPERATING COST	0.450	0.450

PERSONNEL DATA (END OF FY 1978)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	27	0	18	9
CIVILIAN	103	0	55	48
TOTAL	130	0	73	57

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)	COST (MILLION \$)		
	LAB ADMIN OTHER	TOTAL	REAL PROP	EQUIP
1491	0.000 158.047 2280.823	2438.870	592.832	140.161

...MISSION

PLAN, MANAGE, DIRECT, CONTROL AND COORDINATE OVERALL ACTIVITIES OF THE KMR IN ACCORDANCE WITH DOD NATIONAL RANGE POLICIES. SERVE AS THE PRINCIPAL ADVISOR FOR ALL MATTERS PERTAINING TO THE KMR RELATIONSHIP WITH THE TRUST TERRITORY OF THE PACIFIC ISLANDS.

...CURRENT IMPORTANT PROGRAMS

BALLISTIC MISSILE DEFENSE R&D TESTING
 ADVANCED BALLISTIC REENTRY SYSTEMS USAF SAMSD R&D TESTING
 MINUTEMAN 111 USAF SAMSD R&D TESTING
 MINUTEMAN 11&MINUTEMAN 111 USAF SAC OPERATIONAL TESTING
 SPACE OBJECT IDENTIFICATION USAF SPACETRACK

...FUNCTIONS/EQUIPMENT/CAPABILITIES

ALCOR, ALTAR, TRADEX, 2 AN/MPS, AN/TPQ 18, AN/TPX 42 RADARS, 5 RADOTS, 3 SUPER RADOTS, 8 BALLISTIC CAMERAS, 4 SPECTRAL CAMERAS, PHOTO LABORATORY, S BAND TELEMETRY RECEIVING SYSTEMS INCL 8 AUTO TRACKING ANTENNAS, RECEIVE AND RECORD SYS, DATA SEPARATION AND DISPLAY SYS, AND DATA DISTRIBUTION SYS, 2 SPLASH DETECTION RADARS, HYDRO ACCOUSTIC IMPACT TIMING SYS, RV RECOVERY SYS, LONG HAUL AND INTRA ATOLL COMMUNICATIONS SYS, METEOROLOGICAL SYS INCL RANGE METEOROLOGICAL SOUNDING SYS, LAUNCH/ORDNANCE FACILITIES, RANGE OPNS CONTROL CENTER, RANGE SAFETY SYS, CALIBRATION LABORATORY, TIMING AND COUNT DOWN SYS, FREQUENCY CONTROL AND ANALYSIS SYS, 7600/6400 CENTRAL DATA PROCESSING CENTER, POSITION NAVIGATION SYS, AIR TRAFFIC CONTROL SYS INCLUDING TACAN, LOW FREQUENCY HOMING BEACON AND A/G COMMUNICATIONS CLOSED CIRCUIT TELEVISION SYS, DATA REDUCTION AND ACCURACY ANALYSIS FACILITY.

INSTALLATION: LARGE CALIBER WEAPONS SYSTEMS LAB

DOVER, N.J.

CDR. COL. DONALD P. WHALEN

DEP. DIR. DR. JOHN T. FRASIER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	93.359	134.213
TOTAL PROCUREMENT	75.000	83.217
TOTAL O&M	9.301	10.200
TOTAL OTHER	0.378	0.462
TOTAL ANNUAL LAB	178.038	228.092
TOTAL INHOUSE	92.289	116.852
TOTAL INHOUSE RDT&E	41.810	55.303
ANNUAL OPERATING COST	15.210	19.039

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	28	0	15	13
CIVILIAN	1523	51	978	545
TOTAL	1551	51	993	558

ACRES	SPACE AND PROPERTY			CGST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
4000	204.685	184.072	128.700	517.457	8.586	60.600

...MISSION

DES DEV & RSI WEAPONS SYSTEMS - GUN/AMMO - 40MM & FOR TANKS, ARTY, MORTAR
RECOILLESS GUNS, AIR DEFENSE, MINES & DEMOLITION SYS, EXPLOS & WHDS
SUPPORT TECH IN BASIC & APPLIED RES-LIFE CYCLE ENG & WEAPON SYS INTEGR
ENG SUPPT DURING PROCUREMENT, PRODUCTION & FIELD USE OF WEAPON SYSTEM

...CURRENT IMPORTANT PROGRAMS

SPT XMI TANK-120MM AMMO/GUN-105MM IMP AT, MP AMMO-XM774/735/833/815
SCATTERABLE MINE SYSTEMS - MOPMS, GEMS
GUN PROPULSION INCL CHARGE DESIGN, REDUCTION WEAR & EROSION, LAUNCH CHARACT
IMPROVED SENSING MUNITIONS-TARG SENS & SELF FORG FRAG WHD-STAFF, SADARM
IMPROVED NON-NUCLEAR LANCE, PERSHING 2

...FUNCTIONS/EQUIPMENT/CAPABILITIES

DES & RSI WEAPONS SYSTEMS-GUN/AMMO-40MM & FOR TANKS, ARTY, MORTAR
RECOILLESS GUNS, AIR DEFENSE, MINES & DEMOLITION SYS, EXPLOS & WHDS
SUPPORT TECH IN BASIS & APPLIED RES-LIFE CYCLE ENG & WEAPON SYS INTEGR
ENG SUPPT DURING PROCUREMENT, PRODUCTION & FIELD USE OF WEAPON SYSTEM

SPACE AND PROPERTY DATA ARE FOR FY 1977.

CURRENT FIGURES NOT AVAILABLE AT TIME OF PRINTING.

INCLUDES FIRE CONTROL & SMALL CALIBER WEAPONS LABORATORY.

INSTALLATION: LETTERMAN ARMY INSTITUTE OF RESEARCH

PRESIDIO, S.F., CA.

CDR. COL. JOHN D. MARSHALL, JR.

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	6.368	6.313
TOTAL PROCUREMENT	0.000	0.000
TOTAL OEM	0.090	0.090
TOTAL OTHER	3.207	2.915
TOTAL ANNUAL LAB	9.665	9.318
TOTAL INHOUSE	9.665	9.318
TOTAL INHOUSE RDT&E	6.368	6.313
ANNUAL OPERATING COST	2.791	2.077

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	153	28	137	16
CIVILIAN	106	21	86	20
TOTAL	259	49	223	36

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
9	133.198	36.506	305.309	475.013	42.582	10.478

...MISSION

TO PROVIDE GENERAL MEDICAL RESEARCH CAPABILITY AND CONDUCT RESEARCH IN AREAS OF NUTRITION, FOOD WHOLESOMENESS, DERMATOLOGY, INFECTIOUS DISEASE, EFFECT OF LASERS, EXPERIMENT PSYCHOLOGY, TRAUMA, RESUSCITATION AND OTHER RESEARCH AS DIRECTED BY COMMANDER USAMRDC

...CURRENT IMPORTANT PROGRAMS

RESUSCITATION SOLUTIONS FOR THE ACUTELY INJURED
APPLIED NUTRITION STUDIES OF DOD PERSONNEL
ADVERSE EFF ON HUMAN SKIN BY ENVIRONMENTAL FACTORS AND INFECTIONS AGENT
DETERMINATION OF SAFE THRESHOLD LEVELS OF COHERENT RADIATION
METABOLIC ADAPTATION AND METABOLIC INTERRELATIONSHIP

...FUNCTIONS/EQUIPMENT/CAPABILITIES

HUMAN METABOLIC WARD; SURGICAL OPERATING ROOMS, ENVIRONMENTAL ROOMS;
GERM-FREE ANIMALS; SCANNING - TRANSMISSION ELECTRON MICROSCOPES; AUTO
ANALYZERS . RECORDERS; AUTO BETA . GAMMA COUNTERS; SHADOW SHIELD WHOLE
BODY COUNTER; GAMMA CAMERA; AUTO AMINO ACID ANALYZERS; MASS SPECTROMETER
RSCH INCLUDE: NUTR SURVEYS & RATION TESTING; BIOMED CMPT RSCH; BASIC &
APPLIED STUDIES OF TRACE MINERAL METABOLISM, NUTRIENT ROR & INTER-
RELATIONSHIP; EXPR SURG; BIOCHEM STUDIES OF MUSCLE METABOLISM, EXERCISE &
FATIGUE IN MAN & MILITARY DOG. STUDIES OF DELAYED HYPERSENSITIVITY,
FRICTION BLISTERS, STUDIES ON BLOOD PRESERVATION: OPTIONAL BLOOD STORAGE
CONDITIONS & CELL FREE RESUSCITATION FLUIDS SKIN DIS., PROLONGED WATER
IMMERSION, & PRICKLY HEAT. MAINTAINS BREEDING COLONIES SPECIAL ANIMAL
STRAINS.

INSTALLATION: MATERIALS AND MECHANICS RESEARCH CENTER

WATERTOWN, MA.

DIR. DR. E. S. WRIGHT

CDR. DEP. DIR. COL. WILLIAM BENOIT

PROGRAM DATA BY FISCAL YEAR (MILLION \$)

PROGRAM	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDY&E	22.368	25.877
TOTAL PROCUREMENT	8.421	9.807
TOTAL O&M	3.538	4.055
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	34.327	39.739
TOTAL INHOUSE	21.993	24.996
TOTAL INHOUSE RDY&E	14.984	16.816
ANNUAL OPERATING COST	5.663	6.755

PERSONNEL DATA (END OF FY 1978)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	17	1	9	8
CIVILIAN	604	64	197	407
TOTAL	621	65	206	415

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
48	389.000	96.000	157.000	642.000	16.591	16.150

...MISSION

MANAGE DARCOM RDTE STRUCTURAL MATLS AND MECH PROGRAM & CONDUCTS TECH PRO
GRAMS IN MATLS & MECH FOR ARMY MATERIEL. EXECUTES PROGRAM INHOUSE & BY AS
SIGNMENT & FUND TRANSFER FOR APPROPRIATE SEGMENTS TO OTHER DARCOM, DOD &
NON-DOD FACILITIES & EDUCATIONAL & INDUSTRIAL CONTRACTORS. CONTRACTORS

...CURRENT IMPORTANT PROGRAMS

BASIC RESEARCH IN MATERIALS AND MECHANICS
ADVANCED RESEARCH IN MATERIALS FOR AIRCRAFT
ADVANCED RESEARCH IN MATERIALS FOR ARMORED VEHICLES
ADVANCED RESEARCH IN MATERIALS FOR ARMAMENT
ADVANCED RESEARCH IN MATERIALS FOR MISSILES

...FUNCTIONS/EQUIPMENT/CAPABILITIES

MANAGE & CONDUCT BASIC APPLIED & ADVANCED RDTE ON MATERIALS SUCH AS CER-
AMICS, METALS, ORGANIC & INORGANIC POLYMERS COMPOSITES. MANAGE AND CONDUCT
THEORETICAL & APPLIED STUDIES ON MECHANICS OF MATERIALS & SYSTEMS. IDENTIFY
& INVESTIGATE BASIC FACTORS INVOLVED IN PROCESSING & APPLICATION OF NEW
& IMPROVED MATERIALS. TECHNICALLY MANAGE FOUR INFORMATION CENTERS. ASSIST
IN DESIGN & DEVELOPMENT OF PROTOTYPES. DEVELOP METHODS FOR TEST & EVAL-
UATION OF MATERIALS & STRUCTURES. CONDUCT MANTECH PROGRAMS. INSURES THE
EFFECTIVE DEVELOPMENT, MANAGEMENT, AND COORDINATION OF TESTING TECHNIQUES
PROGRAM IN NDT CHEM & PHYSICAL. EXECUTES ASSIGNED PHASES OF INTERNATIONAL
STANDARDIZATION PROGRAMS. DEVELOPS LONG RANGE R&D PLANS CONSISTANT WITH
THE OBJECTIVES OF ARMY, AND OTHER GUIDANCE AS PROVIDED BY DARCOM INCLUD-
ING ASSESSMENTS OF GOVERNMENT AND PRIVATE RESEARCH IN RELATION TO PLANS.

INSTALLATION: MATERIEL SYSTEMS ANALYSIS ACTIVITY

ABERDN.PROV.GROUND,MD

DIR.DR. JOSEPH SPERRAZZA

DEP.DIR.COL. ALBERT DEPROSPERO

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&F	15.691	17.012
TOTAL PROCUREMENT	0.159	0.000
TOTAL O&M	2.901	3.143
TOTAL OTHER	0.439	0.499
TOTAL ANNUAL LAB	19.190	20.654
TOTAL INHOUSE	12.525	13.352
TOTAL INHOUSE RDT&F	9.576	10.812
ANNUAL OPERATING COST	1.943	2.165

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PMDS	TOTAL PROF	NON- PROF
MILITARY	29	0	17	12
CIVILIAN	411	19	305	106
TOTAL	440	19	322	118

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
4	8.140	89.818	1.715	99.673	2.070	0.767

...MISSION

DARCOM LEAD ACTIVITY FOR SYSTEMS ANALYSIS, SURVIVABILITY, RELIABILITY, AVAILABILITY, MAINTAINABILITY METHODOLOGY, INDEPENDENT TEST DESIGN AND OVERALL EVALUATION, LIFE CYCLE SURVEILLANCE, EFFECTIVENESS ESTIMATES FOR WEAPON SYSTEMS, CONTACT WITH FIELD USERS, SYSTEMS ANALYSTS SUPPORT.

...CURRENT IMPORTANT PROGRAMS

TEST DESIGN: EVALUATION OF AAH, HELLFIRE, FIGHTING VEH SYST, PATRIOT, AND XM1
EFFECTIVENESS: SURVIVABILITY OF PATRIOT, HEL, AAH, HELLFIRE
INDEPENDENT EVALUATION OF XM1, BUSHMASTER, GSRs, PATRIOT, STINGER, AND VIPER
EVALUATE DEV TEST OF AN/TPQ-36:37 COUNTERFIRE RADAR
PREPARE JOINT MUNITIONS EFFECTIVENESS MANUALS FOR AIR-TO-AIR, AIR-TO-SURF

...FUNCTIONS/EQUIPMENT/CAPABILITIES

AMSAA PERSONNEL GIVE THIS ORGANIZATION MANY CAPABILITIES: EVALUATION OF CHEMICAL BIOLOGICAL SYSTEMS IN CONJUNCTION WITH OTHER SYSTEMS, WARGAMING, ASSESSMENT OF MILITARY WORTH AND COMBAT UTILITY OF EXISTING AND PROPOSED GROUND AND AIR WARFARE SYSTEMS, DESIGN OF DEVELOPMENT TESTS AND INDEPENDENT EVALUATIONS OF MATERIEL SYSTEMS, OVERVIEW OF LIFE-CYCLE SURVEILLANCE PROGRAM, MAINTAINING CONTACT WITH USERS OF EQUIPMENT TO IDENTIFY NEEDED IMPROVEMENTS, EVALUATION OF PROPOSED SYSTEMS AS THEY RELATE TO LOGISTIC SYSTEM SUPPORT OPERATIONS, EVALUATION OF MISSILE GUIDANCE & CONTROL SYSTEMS AND FIRE CONTROL SYSTEMS.

INSTALLATION: MATERIEL TESTING DIRECTORATE

ABERDEEN PROV. GR., MD.

CDR. COL. FRANK S. KOOS

DIR. COL. CHARLES W. BINNEY

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	31.081	29.958
TOTAL PROCUREMENT	10.236	9.866
TOTAL O&M	1.089	1.050
TOTAL OTHER	6.386	6.406
TOTAL ANNUAL LAB	48.792	47.280
TOTAL INHOUSE	47.786	46.309
TOTAL INHOUSE RDT&E	30.364	29.267
ANNUAL OPERATING COST	18.966	20.705

PERSONNEL	PERSONNEL DATA (END OF FY 1978)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	225	1	35		190
CIVILIAN	755	11	201		554
TOTAL	980	12	236		744

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL REAL PROP	EQUIP	
22865	728.692	4.351	269.509	1002.552	16.188	44.167

...MISSION

PLAN CDT & REPT TESTS OF WPNS WPN SYS RKTS & GM SYS FIRE CON & TGT ACQ EQUIP ITEMS OF AMMO & MUN COMPONENTS CRT VEHs OTHER AUTO MAT GEN EQUIP. PROV COR SVS FOR PROC OF ARMOR PLATE FOR ALL DARCOM INSTLS & ACTIVITIES. PROV SUPPORT SVCS TO APG ELEMENTS & SUPPORTED COMMANDS.

...CURRENT IMPORTANT PROGRAMS

XM1 TANK SYSTEM DARCOM (XM1)
M60-A3 TANK SYSTEM
GROUND IMPLACE MINE-MARKING SYS (GEMSS)
HOW MED TOWED 155MM XM198 (155MMXM198)
10 TON HIGH MOBILITY TRK (MAN) FRG

...FUNCTIONS/EQUIPMENT/CAPABILITIES

TEST AREA 68700 ACRES, RANGE TO LAND IMPACT 26000M, RANGE TO WATER IMPACT 30000M, 41 MILES OF AUTMV CRS INCL 27 SP ENGR TEST CRS & OBSTACLES. VAR OF ENVIR OR COND EQUIP, SP CHAMBERS FOR SUBJECTING EQUIP TO DUST, SALT SPRAY, OR SOLAR RADN, ISOLATED VIBRATION TEST FAC WHICH PERMITS SHAKING EXPLO EQUIP SIMULTANEOUSLY WITH TEMP CONDITIONING, FAC FOR CONTROLLED TESTS OF ELEC CON & GUIDANCE EQUIP, FREQ SOURCE WHICH PERMITS TESTING ALL TYPES OF MAT IN PRESENCE OF A HIGH INTENSITY ELEC MAGNETIC RADN, SP FAC FOR TEST OF ARMOR PLATE, SP VEL & TGT EQUIP IS AVAIL FOR OBSERVATIONS DURING RAPID FIRE AS IS A RKT TRACK FOR CONTROLLED TERMINAL BALLISTIC TESTS, FAC AVAIL FOR TESTS OF SP ELECTRONIC & FIRE CON EQUIP & RELATED SYS & COMPONENTS. PULSE RADIATION FAC AVAIL FOR USE IN RADIATION TESTING NUCLEAR EFFECTS, SIMULATION REACTOR TECHNOLOGY & RADIATION PHYSICS.

INSTALLATION: MEDICAL BIOENGINEERING R&D LABORATORY

FT.DETRICK,MD.

CDR.COL. CHARLES M. DETTOR

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	3.287	3.779
TOTAL PROCUREMENT	0.000	0.000
TOTAL OEM	0.115	0.012
TOTAL OTHER	0.841	0.862
TOTAL ANNUAL LAB	4.243	4.653
TOTAL INHOUSE	4.243	4.653
TOTAL INHOUSE RDT&E	3.287	3.779
ANNUAL OPERATING COST	0.981	1.107

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	28	2	14	14
CIVILIAN	103	12	36	67
TOTAL	131	14	50	81

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
5	45.888	27.300	34.068	107.256	3.216	3.293

...MISSION

CONDUCTS ENG RSCH AND DEVELOPMENT OF MILITARY MEDICAL EQUIPMENT
 CONDUCTS THE SURGEON GENERALS' RDT&E PROGRAM IN INTEGRATED PEST MGMT
 CONDUCTS ENVIRONMENTAL & OCCUPATIONAL HEALTH RESEARCH
 CONDUCTS LIFE CYCLE SYSTEM MGMT OF MED DENTAL AND PEST MGMT MATERIEL

...CURRENT IMPORTANT PROGRAMS

DEVELOPMENT OF FIELD MEDICAL DEVICES AND EQUIPMENT
 PEST MGMT RDT&E INCLUDING METHODS, MATERIALS, EQUIPMENT AND CONCEPTS
 DEVELOP OF ENVIRONMENTAL QLTY STDS FOR DEMIL & INSTALL RESTORATION
 ENVIRONMENTAL & OCCUPATIONAL HEALTH RSCH ON SMOKE & OBSCURANTS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

DESIGN, DEVELOP AND FABRICATE PROTOTYPE AND TEST MODELS OF MIL MED MAT
 PRODUCE LIMITED QUANTITIES OF MED MAT FOR URGENT MIL REQ
 DESIGN, DEVELOP AND FABRICATE PEST MGMT EQUIP AND SYSTEMS
 DESIGN, DEVELOP AND FABRICATE PROTOTYPE AND TEST MODELS OF MIL DENTAL MAT
 PERFORM HEALTH AND ECOLOGICAL EFFECTS RSCH ON ENVIRONMENTAL POLLUTANTS
 PERFORM PILOT PLANT RSCH FOR WASTEWATER REUSE FOR FIELD ARMY

INSTALLATION: MEDICAL R & D COMMAND

FT.DETRICK,MD.

CDR.MG.WILLIAM S AUGERSON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	24.397	26.048
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	1.655	1.655
TOTAL ANNUAL LAB	26.052	27.703
TOTAL INHOUSE	26.052	27.703
TOTAL INHOUSE RDT&E	24.397	26.048
ANNUAL OPERATING COST	2.041	2.077

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	58	24	47	11
CIVILIAN	93	1	3	90
TOTAL	151	25	50	101

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
0	0.000	23.300	0.000	23.300	0.000	0.146

...MISSION

ADMINISTRATION & COORDINATION OF THE RSCH,DEV,TEST & EVALUATION PROGRAM
PROG LIMITED TO UNIQUE MIL PROBLEMS WITHIN US & CONUS

...CURRENT IMPORTANT PROGRAMS

CARE OF THE WOUNDED
PREVENTION & CONTROL OF INFECTIOUS DISEASES
ENHANCEMENT OF MILITARY PERFORMANCE
PROTECTION AGAINST MILITARY ENVIRONMENTAL HAZARDS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

SERVES AS AN ADM HDQTRS FOR THE ARMY MEDICAL DEPT.

INSTALLATION: MEDICAL RSCH INST OF INFECTIOUS DISEASES FT. DETRICK, MD.

CDR. COL. RICHARD F. BARQUIST CH. SCI. DR. WILLIAM R. BEISEL

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	10.771	10.096
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	3.641	3.890
TOTAL ANNUAL LAB	14.412	13.986
TOTAL INHOUSE	11.812	12.532
TOTAL INHOUSE RDT&E	8.171	8.642
ANNUAL OPERATING COST	5.332	4.926

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	308	53	104	204
CIVILIAN	197	24	67	130
TOTAL	505	77	171	334

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
43	80.854	19.820	209.699	310.373	17.824	4.775

...MISSION

PERF STUDIES ON THE PATHOGENESIS, DIAGNOSIS, PROPHYLAXIS, TREATMENT
EPIDEMIOLOGY OF NATURALLY OCCURRING INFECT DISEASES OF MIL IMPORT
WITH EMPHASIS ON PROBLEMS ASSOC WITH THE MED DEFENSE AGAINST BIO
AGENTS AND ON MICROORGANISMS WHICH REQ SPEC CONTAIN FACILITIES.

...CURRENT IMPORTANT PROGRAMS

DEVELOPMENT OF NEW VACCINES & TOXOIDS
IMMUNOLOGICAL STUDIES TO DETERMINE HOW TO IMPROVE VACCINE PRODUCTION
STUDIES ON PATHOGENESIS OF MILITARILY IMPORTANT INFECTIONS
DEVELOPMENT OF MORE RAPID & ACCURATE METHODS OF INFECTION DIAGNOSIS &
MEDICAL THERAPY FOR BW DEFENSE

...FUNCTIONS/EQUIPMENT/CAPABILITIES

TWO LARGE BLDGS PROVIDE ABOUT 310000 SQ FEET OF SPACE & CONTAIN 23
MODERN LAB SUITES WHICH REPRESENT THE LATEST IN FUNCTIONAL CONCEPTS,
LAB DESIGN, & SAFETY. A COMPLEX PROG OF MED RSCH IS CONDUCTED & INCLUDES
IMMUNOLOGY, PATHOLOGY, PHYSIOLOGY, SEROLOGY, BIOCHEMISTRY, BIOPHYSICS,
MOLECULAR BIOLOGY, & TISSUE CULTURE. SPECIAL CAPABILITIES INCLUDE ELECTRON
MICROSCOPY, RADIOIMMUNOASSAY LABS, A VACCINE PRODUCTION SUITE, HOSPITAL
FAC FOR MED PATIENTS & FOR RSCH STUDIES WITH VOLUNTEERS. USAMRIID RSCH
IS SUPPORTED BY TWO COMPUTERS & AN ANIMAL FARM.

INSTALLATION: MISSILE RSCH . & DEV. CMD.

REDSTONE ARSENAL, AL.

CDR.BG. FRANK P. RAGANO

TECH.DIR.DR.CHARLES MCKINLEY

PROGRAM DATA BY FISCAL YEAR (MILLION \$)

PROGRAM	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	57.745	62.730
TOTAL PROCUREMENT	30.162	26.013
TOTAL O&M	7.771	8.706
TOTAL OTHER	1.871	3.238
TOTAL ANNUAL LAB	97.549	100.687
TOTAL INHOUSE	67.495	67.337
TOTAL INHOUSE RDT&E	38.858	37.867
ANNUAL OPERATING COST	11.388	13.016

PERSONNEL DATA (END OF FY 1978)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	26	0	19	7
CIVILIAN	988	68	679	309
TOTAL	1014	68	698	316

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)	COST (MILLION \$)
	LAB ADMIN OTHER TOTAL	REAL PROP EQUIP
11000	663.993 318.702 428.008 1410.703	130.072 88.367

...MISSION

CONDUCT OR MANAGE RSCH, DESIGN, DEV & TEST OF ASSIGNED MATERIEL; PERFORM R&D TO ADV TECH & GENERATE NEW SYSTEMS; REDUCE LEAD-TIME; IMPROVE RELIABILITY & ASSURE ACCEPTABLE PROD IMPROVEMENTS; PROCURE MAJOR ITEMS OF MATERIEL; MANAGE EFFORTS OF CONTRACTORS/DGA IN THE PRODUCTION OF MATERIELS

...CURRENT IMPORTANT PROGRAMS

MULTI-ENVIRONMENT ACTIVE RF SEEKER (MARFS).
QUIET RADAR
OBSCURATION PROGRAM
PRODUCTION ENGINEERING
NEW LASER CONCEPTS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

TECH LAB IS EQUIPPED TO STUDY PROBLEMS IN PROP, AERO, G&C & STRUCTURES. MAJOR FAC IS MCHARROW LAB WHICH HOUSES 4 OF THE 6 DIR SOME OF THE UNIQUE FAC ARE: ADV SIM CTR, A COMPUTER COMPLEX SURROUNDED PERIPHERALLY BY 3 ENVIR EFFECTS SIMULATORS; MSL COMPUTER SOFTWARE/HARDWARE CTR; SIG EVAL ENVIR CHAMBER; ARMY MSL OPTICAL RANGE DESIGNED TO MEASURE LASER RADAR SIG. ENGR LAB MAINTAINS & OPERATES 7 MAJOR TEST AREAS WHICH ENCOMPASS FLIGHT STATIC, ENVIRONMENTAL & FUNCTIONAL TEST. STATE-OF-THE-ART FACILITIES & EQP SUCH AS LASER TRACKERS & ELECTRO MAGNETIC RADAR SENSORS; ENGR DESIGN & DEV OF CORRECTIONS TO DESIGN DEFICIENCIES IN FIELDED WEAPON SYSTEMS. HIGH ENERGY LASER LAB PERFORMS ARMY LEAD LAB FUNCTION IN HIGH POWER/ENERGY LASER RSCH & TECH & MSL RSCH. A SMALL SCALE CLOSED CYCLE CIRCULATOR WITH E-BAND GUN THAT CAN BE REPETITELY PULSED WAS ADDED IN FY78.

INSTALLATION: MOBILITY EQUIP R & D COMMAND

FT. BELVOIR, VA.

CDR. COL. BERNARD C. HUGHES

TECH. DIR. MR. DONALD B. DINGER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RD&E	55.028	68.284
TOTAL PROCUREMENT	68.257	164.000
TOTAL O&M	27.407	16.500
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	150.692	248.784
TOTAL INHOUSE	45.429	41.420
TOTAL INHOUSE RD&E	27.348	27.420
ANNUAL OPERATING COST	16.765	12.270

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	79	1	25	54
CIVILIAN	1204	20	318	886
TOTAL	1283	21	343	940

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1064	750.849	146.730	209.879	1107.458	58.523	31.770

...MISSION

PROVIDE TECHNOLOGY BASE & MANAGE MAT SYS & INITIAL ACO PGMS FOR ASGD MAT IN ORDER TO DEV NEW & IMPROVED SYS WHICH MEET DA RQMTS. ARE LOGISTICALLY SPTABLE CAN BE PROC WITHIN BUDGET CONSTRAINTS & ARE COST & OP EFFECTIVE. SPT READINESS COMMANDS IN FOLLOW-ON ACO OF ASSGD MAT

...CURRENT IMPORTANT PROGRAMS

MARINE & BRIDGE SYSTEMS
ELECTRIC POWER GENERATION
COUNTER INTRUSION SYSTEMS
FUELS & WATER SYSTEMS
COUNTERMINE SYSTEMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

FAC INCL
MINE FLD TEST LAMES, SENSOR TEST AREA, RDD FREQ ANECHOIC CHAMBER, FLUID STROKING TEST CHAMBER, FUELS & LUBES LAB, FIRE SUPPRESSION CHAMBER, CAM EVAL & REF CEN, FUEL CELL & BTRY TEST STAS, ELEC PROPULSION SIM, MPPS POWER TEST CELLS, BRG TEST HANGAR, MOBILE STRESS ANAL VAN, TRK STABILITY TEST TILT TABLE, VEH TEST TRACKS, SHOCK & VIBRATION DYNAMIC SIM, ENVI SIM, MAT RSCH LAB, CALBR & INSTRUMENTATION, EMI SIM, COMPT CEN, STILL MOPIC SPT, RSCH & DEV MODEL FABRICATION SHOPS

INSTALLATION: NATICK R&D COMMAND

NATICK, MA.

CDR. COL. H. F. PENNY

TECH. DIR. DR. DALE H. STELING

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	23.722	22.312
TOTAL PROCUREMENT	0.300	0.049
TOTAL O&M	16.031	11.312
TOTAL OTHER	3.655	2.752
TOTAL ANNUAL LAB	43.708	36.425
TOTAL INHOUSE	36.884	31.094
TOTAL INHOUSE RDT&E	18.840	17.878
ANNUAL OPERATING COST	7.587	7.010

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-- PROF
MILITARY	104	5	27	77
CIVILIAN	1098	76	422	676
TOTAL	1202	81	449	753

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)				REAL	PROP
	LAB	ADMIN	OTHER			EQUIP
2913	552.557	65.900	417.994	1036.451	27.050	18.366

...MISSION

CONDUCT SCIENTIFIC R&D TO SUSTAIN AND PROTECT MIL PERS UNDER ALL COND'TNS
DESIGN AND DEVELOP FOOD & FOOD SERV SYS, PROT CLOTH&AIRDROP DELIV EQUIP.
ACCOMPLISH ILS FUNCTION IN ABOVE & EXECUTE FIRST PROD PROD & FIELDING OF
NEW ARMY MANAGED ITEMS. PROV TECH & ENG SUPPORT TO PROC AGENCIES.

...CURRENT IMPORTANT PROGRAMS

RADIATION PRESERVATION OF FOOD
SUBSISTENCE TECHNOLOGY
ANALYSIS AND DESIGN OF MILITARY FEEDING SYSTEMS
CLOTHING AND EQUIPMENT TECHNOLOGY
AIRDROP TECHNOLOGY

...FUNCTIONS/EQUIPMENT/CAPABILITIES

COBALT 60 IRRAD FACIL DESIGNED FOR MAX FLEXIBILITY IN FOOD PROCESS; HIGH
POWER LINEAR ACCELERATOR; PILOT PLANT FOR FOOD AND FOOD PACKAGING; BACTER-
IOLOGY LAB EQUIP FOR INVESTIGATION OF PATHOGENIC MICROORGANISMS; HIGH
RESOLUTION MASS SPECTROMETER FOR ANALYSIS OF VOLATILE COMPOUNDS; FEBETRON
MACHINE USED AS A RAD SOURCE FOR PULSE RADIOLYSIS; PILOT PLANT TO STUDY
DATA ON CONVERTING CELLULOSE TO GLUCOSE ENZYMATIALLY; DYEING AND FINISH-
ING LAB FOR CONDUCTING STUDIES OF TEXTILES; COMPUTER GENERATED SYS OF
CLOTHING PATTERNS TO OUTPUT COMPLETE TARIFF OF SIZES FROM ONE MASTER;
CLIMATIC CHAMBERS TO TEST ITEMS AT TEMPS -57C TO 874C WITH WIND & RAIN;
FLAME PROTECTIVE LAB AND FACILITY INCLUDING AN OUTDOOR FLAME PIT;
UNIVAC 1106 COMPUTER WITH DISK PACS8TAPE DRIVES AND INPUT/OUTPUT EQUIP;
SHOPS USED FOR DEVL, TESTING AND ENG ON CLOTHING, TENTAGE, SHELTERS, PCHTS;

INSTALLATION: NIGHT VISION & ELECTRO OPTICS LABORATORY

FT. BELVOIR, VA.

DIR. MR. EDWARD J. SHEEHAN

DEP. DIR. MR. JOHN JOHNSON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978	1979
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	33.705	31.949
TOTAL PROCUREMENT	57.178	24.000
TOTAL OEM	0.615	0.500
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	91.498	56.449
TOTAL INHOUSE	20.984	16.473
TOTAL INHOUSE RDT&E	14.748	12.973
ANNUAL OPERATING COST	2.115	2.432

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON-PROF
MILITARY	27	0	8	19
CIVILIAN	521	36	244	277
TOTAL	548	36	252	296

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
38	180.639	27.186	20.000	227.825	32.000	50.000

...MISSION

NV&EOL IS RESPONSIBLE FOR PROVIDING THE ARMY WITH A NIGHT VISION CAPABILITY THAT WILL ALLOW IT TO OPERATE WITH NEAR DAYLIGHT EFFICIENCY. THE SYS DEV PROGRAM IS STRUCTURED AROUND A STRONG TECHNOLOGY BASE WHICH CONSISTS OF FIR, IMAGE INTENSIFICATION, RADIATION SOURCES, & VISIONICS.

...CURRENT IMPORTANT PROGRAMS

LOW COST NIGHT VISION AIDS
AIRBORNE GOGGLES
THERMAL WEAPON SIGHT
SECOND GEN ELECTRO-OPTICAL DEVICES
NON-SCANNING THERMAL SYSTEMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

NV&EOL'S MOST SIGNIFICANT FACILITY CAPABILITIES ARE: NIGHT VISION SYSTEM LAB, DETECTOR FABR & ANALYSIS FACILITY, X-RAY ANALYSIS FACILITY, SECONDARY-ION MASS SPECTROMETER, COMPUTER-CONTROLLED SCANNING ELECTRON MICROSCOPE, SURFACE RESEARCH FACILITY, IR DETECTOR FACILITY, FOCAL PLANE ARRAY TEST FACILITY, IR OPTICAL TEST FACILITY, SEMI-CONDUCTOR LASER RESEARCH FACILITY, SEMI-CONDUCTOR MATERIALS RESEARCH FACILITY, ELECTRONICS TEST FACILITY, INTERACTIVE IMAGE PROCESSING FACILITY, LASER RANGE(S), & 3-D MULTI-SPECTRAL SEARCH SIMULATOR.

INSTALLATION: RESEARCH INST FOR BEHAVIORAL & SOCIAL SCI WASHINGTON, D.C.

CDR. COL. WILLIAM L. HAUSER TECH. DIR. DR. JOSEPH ZEIDNER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + FST)
TOTAL RDT&E	23.502	23.020
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.735	0.773
TOTAL ANNUAL LAB	24.237	23.793
TOTAL INHOUSE	11.533	12.264
TOTAL INHOUSE RDT&E	10.798	11.491
ANNUAL OPERATING COST	3.209	3.978

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	36	3	20	16
CIVILIAN	227	143	227	0
TOTAL	263	146	247	16

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
0	46.110	2.559	6.190	54.859	0.000	1.795

...MISSION

SUPPORTS DECISION-MAKING BY THE ARMY'S LEADERS AND MANAGERS THROUGH RESEARCH, DEVELOPMENT, TEST AND EVALUATION PROGRAMS IN PERSONNEL AND MANPOWER, TRAINING, TRAINING DEVICES AND SIMULATION, AND HUMAN FACTORS IN TRAINING AND OPERATIONAL SYSTEMS.

...CURRENT IMPORTANT PROGRAMS

CRITERIA FOR DETERMINING EFFECTIVE REFRESHER TRAINING SCHEDULING
 ASSESS IMPACT OF ORGANIZATIONAL EFFECTIVENESS APPLICATIONS IN ARMY UNITS
 INCORP OF ENGAGEMENT SIMULATION TRAINING TECHNOLOGY IN ARTEP 71-2
 DESIGN OF TANK CREW GUNNERY TRAINER FOR XMI TANK
 COMPUTER EMBEDDED SQT FOR THE TACTICAL FIRE DIRECTION SYSTEM

...FUNCTIONS/EQUIPMENT/CAPABILITIES

EIGHT CONUS FIELD UNITS & ONE IN EUROPE, LIAISON OFFICES AT TRADOC, FORSCOM, & IN LONDON SUPPORT IN-HOUSE RSCH PRGM MANAGED BY 2 LABS WITHIN WHICH ARE 6 TECH AREAS, 1 PERS & MANPWR, 2 TRAINING, 3 LDRSHIP & MNGMNT, 4 ENGAGEMENT SIMULATION, 5 EDUC TECH & SIMULA, 6 HUMAN FACTORS. CONUS FIELD UNITS ARE AT FTS BENNING, BLISS, KNOX, SILL, HOOD, LEAVENWORTH, RUCKER, & PRES OF MONTEREY. IN-HSE EXPERIMENTAL FACILITIES INCL LABORATORY AREA. ARMY-OWNED IN-HSE COMPUTERS PERMIT, WITHIN THE LABS, REAL - TIME EXPERIMENTATION, GAMING, & SIMULATION. ADDITIONAL TERMINAL LINES TO EXTERNAL COMPUTERS PROVIDE FLEXIBILITY. EXPR PROG PERMITS WIDE RANGE OF LAB OPNS TO TEST HUMAN PERFORMANCE HYPOTHESES UNDER SIMULATED OPERATIONAL CONDITIONS, INCL A COMMAND POST IN SIMULATED TACTICAL SITUATIONS.

INSTALLATION: RSCH INSTITUTE OF ENVIRONMENTAL MEDICINE

NATICK, MA.

CDR. COL. HARRY F. DANGERFIELD

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	3.906	3.878
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	1.299	0.968
TOTAL ANNUAL LAB	5.205	4.846
TOTAL INHOUSE	5.205	4.846
TOTAL INHOUSE RDT&E	3.906	3.878
ANNUAL OPERATING COST	0.872	0.888

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	84	5	43	41
CIVILIAN	97	18	50	47
TOTAL	181	23	93	88

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
4	60.421	18.563	28.647	107.631	3.713	3.426

...MISSION

MISSION: TO CONDUCT BASIC & APPLIED RES TO DETERMINE THE EFFECTS OF HEAT COLD, HIGH TERRESTRIAL ALTITUDE & WORK UPON THE SOLDIERS' LIFE PROCESSES, PERFORMANCE & HEALTH. CONDUCTS CONTINUING RESCH IN THE PHYSIOLOGICAL ASPECTS AND HEALTH EFFECTS OF PHYSICAL FITNESS TRAINING.

...CURRENT IMPORTANT PROGRAMS

EVALUATION OF ARMY PHY FITNESS TRAINING PROG & MOS FITNESS REQTS
BIOLOGICAL PROCESSES THAT LIMIT HEAVY PHYSICAL WORK
EFFECTS OF RAPID AIR TRANSLOCATION ON PHYSICAL FITNESS
PREDICTION OF LIMITS OF MIL PERF AS OF FUNCT OF ENVMT CLOTHING & EQUIP.
PREVENTION & TREATMENT OF DISABILITIES DUE TO MIL OPERS IN EXTREME ENVMT

...FUNCTIONS/EQUIPMENT/CAPABILITIES

CONDUCT RSCH & PROVIDE GUIDANCE TO DESIGNERS, ENGRS, TACTICIANS PLANNERS & PHYSICIANS ON MIL PERFORMANCE & CASUALTY PREVENTION & TREATMENT IN EXTREME CLIMATES & ENGINEERED ENVIRONMENTS; ADVISE ON HEALTH & SAFETY IN MANEUVERS DURING HEAT, COLD OR HYPOXIC STRESS & RAPID AIR TRANSLOCATION. HUMAN & ANIMAL RSCH USE APPROX 50 VOLUNTEER TEST SUBJECTS, & CLIMATIC CHAMBERS OF USA NARADCOM. IN ADDITION, APPROX 1400 OTHER HUMAN TEST SUBJECTS WERE UTILIZED AT VARIOUS LOCATIONS THROUGHOUT CONUS & EUROPE. THE MAJOR EQUIP & FACILITY CAPABILITIES OF THE LABORATORY INCLUDE, BUT ARE NOT LIMITED TO, MANY SM CHAMBERS, ANIMAL CARE FACILITIES, ELECTRON MICROSCOPE, UNDERWATER RSCH POOL, COPPER MANIKINS & DIVERSE EQUIP FOR BIOLOGICAL, BIOPHYSICAL, MEDICAL, PHYSIOLOGICAL, PHARMACOLOGICAL & PSYCHOLOGICAL MEASUREMENT. THE INSTITUTE MAINTAINS A FIELD FAC AT PIKES PEAK, COLORADO.

INSTALLATION: SIGNALS WARFARE LABORATORY

VINT HILL, VA.

DIR. MR. HERBERT S. HOVEY, JR.

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	36.553	31.816
TOTAL PROCUREMENT	22.309	114.192
TOTAL O&M	1.808	1.904
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	60.670	147.912
TOTAL INHOUSE	4.089	4.130
TOTAL INHOUSE RDT&E	3.467	3.085
ANNUAL OPERATING COST	0.231	0.322

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	69	0	14	55
CIVILIAN	163	5	57	106
TOTAL	232	5	71	161

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
1	46.000	8.000	38.000	92.000	0.309	3.772

...MISSION

RESEARCH, DEVELOPMENT, EVALUATION, ACQUISITION AND PROD IMP OF SIGINT/EW SYSTEMS TO MEET STRAT AND TAC RQMTS TO SUPPORT: (1) EXPLOITATION OF ENEMY COMM/NON-COMM OPERATIONS. (2) DENIAL OF ENEMY USE OF COMM/NON-COMM SYS AND WEAPONS SYS. (3) DENIAL OF ELECT INFO TO ENEMY BY USE OF SIGSEC.

...CURRENT IMPORTANT PROGRAMS

EW- DEVELOPMENT/PRODUCTION OF AREA SUPPORT EW EQUIPMENT
 SIGINT- DEVELOPMENT/PRODUCTION OF SIGINT EQUIPMENT
 TECHNOLOGY- HIGH SPEED COMPUTERIZED SIGNAL PROCESSING AND ANALYSIS
 COMM/NON-COMM TARGET LOCATION SYSTEMS
 SIGSEC- COUNTERSIGINT-ELSEC

...FUNCTIONS/EQUIPMENT/CAPABILITIES

MAJOR CAPABILITY CONSISTS OF THE IN-HOUSE EXPERTISE NECESSARY TO CONDUCT THE REQUIRED RDT&E EFFORT TO INSURE SUCCESSFUL INTRODUCTION TO THE FIELD OF SOPHISTICATED SIGINT/EW SYSTEMS. PERSONNEL EXPERIENCED NOT ONLY IN THE TECHNICAL AREAS OF ELECTRONICS AND COMPUTER SCIENCES BUT ALSO IN INTEGRATED LOGISTICS SUPPORT, PRODUCT ASSURANCE; RELIABILITY, AVAILABILITY, AND MAINTAINABILITY, ELECTROMAGNETIC COMPATIBILITY, COMPUTERIZED TEST EQUIPMENT, PRODUCTION SERVICES AND DOCUMENTATION REQUIREMENTS (BASIS OF ISSUE PLANS, QUAL, QUANT PERSONNEL REQ INFO, ETC.) IS REQUIRED. THE SWL HAS A MAJOR IN-HOUSE SIGNALS ACQUISITION AND PROCESSING LABORATORY. FACILITIES INCLUDE ACCESS TO A VARIETY OF ANTENNAS, (INCLUDING LINEAR DISPOSED ANT ARRAY) SIGNAL DISPLAY AND PROCESS EQUIPMENT, COMPUTERS AND A VARIETY OF RECEIVERS AND SIGNAL SEARCH EQUIPMENT.

INSTALLATION: TANK-AUTO R & D COMMAND

WARREN, MI.

CDR.MG.D.C. DECKER

CH.SCI.DR.E.N. PETRICK

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	19.877	33.118
TOTAL PROCUREMENT	113.864	132.243
TOTAL O&M	3.982	3.340
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	137.723	168.701
TOTAL INHOUSE	16.039	17.852
TOTAL INHOUSE RDT&E	7.781	11.493
ANNUAL OPERATING COST	2.081	1.576

PERSONNEL	PERSONNEL DATA (END OF FY 1978)				NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	14	1	13		1
CIVILIAN	271	7	157		114
TOTAL	285	8	170		115

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)				REAL PROP	EQUIP
	LAB	ADMIN	OTHER	TOTAL		
11	140.319	99.974	0.000	240.293	38.294	125.000

...MISSION

RESPONSIBLE FOR ACCOMPLISHING DESIGN, DEVELOPMENT, ACQUISITION AND INITIAL DEPLOYMENT OF ASSIGNED WEAPON/EQUIP SYSTEMS. CONDUCT AND MANAGE RESEARCH, PERFORM PROCUREMENT AND QUALITY ASSURANCE THRU DEVELOPMENT. PERFORM RELIABILITY-MAINTAINABILITY ASSESSMENT

...CURRENT IMPORTANT PROGRAMS

HOLOGRAPHIC INTERFEROMETRY TECHNIQUES TO TEST TANK-AUTO COMP
ACOUSTIC DETECTION OF HELICOPTER FROM BUTTONED-UP CMBT VEH
COUNTERMEASURES AGAINST INFRARED AND RADAR THREATS
TOTAL ANALYTICAL BALLISTIC PROCEDURE APPLIED TO CMBT VEH SYS
TANK SCIENCE AND TECHNOLOGY PLAN

...FUNCTIONS/EQUIPMENT/CAPABILITIES

VEHICLE BRAKE DYNAMOMETER
VEHICLE SUBSYSTEM INTEGRATION
ANALYTICAL PREDICTION OF MILITARY VEHICLE PERFORMANCE
VEHICLE MOTION SIMULATOR
RIVER SIMULATOR FACILITY-LAND LOCOMOTION SOIL BINS
MINE PROTECTION
VEHICLE SIGNATURE PROGRAM
VEHICLE COMPONENT EVALUATION
SIX DEGREE OF FREEDOM SIMULATOR
METAL ANAL W/MICROPROBE ELECTRON MICROSCOPE ANALYZER AND TECHNIQUES
DEVELOPMENT OF IMPROVED ARMOR WELDING AND FABRICATION
LOW TEMPERATURE SHOCK AND VIBRATION TEST FACILITIES

INSTALLATION: TROPIC TEST CENTER

FT. CLAYTON, C.Z.

CDR. COL. WENDELL L. PRICE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	2.720	2.957
TOTAL PROCUREMENT	0.026	0.001
TOTAL OEM	0.097	0.000
TOTAL OTHER	1.211	1.224
TOTAL ANNUAL LAB	4.054	4.182
TOTAL INHOUSE	3.788	4.015
TOTAL INHOUSE RDT&E	2.555	2.790
ANNUAL OPERATING COST	0.400	0.400

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	80	0	15	65
CIVILIAN	62	3	13	49
TOTAL	142	3	28	114

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
17500	17.710	41.400	83.891	143.001	1.086	1.906

...MISSION

PLAN, CONDUCT AND REPORT ON ENVIRONMENTAL PHASES OF DEVELOPMENT TEST II, AND OTHER DEVELOPMENTAL TYPE TESTS. PROVIDE ADVICE AND GUIDANCE ON TESTS AND EVALUATION MATTERS TO MATERIEL DEVELOPERS, MATERIEL PRODUCERS, OTHER SERVICES, AND PRIVATE INDUSTRY.

...CURRENT IMPORTANT PROGRAMS

SURFACE LAUNCHED UNIT FUEL AIR EXPLOSIVE (SLUFAE)
BLACKHAWK
FAMILY ENGINEER CONSTRUCTION EQUIP (FAMECE)
PSYCHO-PHYSICAL MEASUREMENT TECHNIQUES (ILIR)
TEST METHODOLOGY AND R AND D INSTRUMENTATION PROGRAMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

TEST FACILITIES AND LABORATORIES WITH INSTRUMENTS AND EQUIPMENT FOR CONDUCTING TROPIC TESTS OF DOD MATERIEL IN THE NATURAL ENVIRONMENT INCLUDE ELECTRONICS, HUMAN FACTORS, CHEMICAL, MICROBIOLOGICAL, MATERIALS, SOILS, CALIBRATION, AUDIO-VISUAL AND DATA ANALYSIS LABORATORIES. OTHER TEST RESOURCES CONSIST OF FIRING RANGES, NATURAL TERRAIN MOBILITY COURSES, AMMO TEST STORAGE AND FUNCTIONING AREAS, JUNGLE, GRASS AND COASTAL MATERIEL EXPOSURE SITES, JUNGLE RADIO RANGING SITES, POL TANK FARM, MAN-PACK PORTABILITY COURSE, CALIBRATED SEISMIC DETECTION AND CHEMICAL TEST GRIDS AND 18,000 ACRES OF BROADLEAF EVERGREEN TREES, SEMI-DECIDUOUS TREES, MARSHLAND, GRASSLAND, CORAL REEFS, FLAT AND HILLY TERRAIN AND ALL TYPES OF TROPIC VEGETATION.

INSTALLATION: WALTER REED ARMY INSTITUTE OF RESEARCH

WASHINGTON, D.C.

CDR. COL. GARRISON RAPMUND

ASSOC. DIR. DR. HOWARD NOYES

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RD&E	36.068	33.783
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	1.517	1.651
TOTAL OTHER	7.007	7.157
TOTAL ANNUAL LAB	44.592	42.591
TOTAL INHOUSE	30.124	28.928
TOTAL INHOUSE RD&E	21.600	20.120
ANNUAL OPERATING COST	6.166	7.004

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	466	123	438	28
CIVILIAN	445	58	211	234
TOTAL	911	181	649	262

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
203	382.974	58.360	0.000	441.334	10.040	15.187

...MISSION

MAJOR FUNCTIONS ARE BIOMEDICAL RESEARCH POSTGRADUATE MEDICAL SCIENCE INSTRUCTION AND MEDICAL REFERENCE LABORATORY SERVICES. RESEARCH AREAS OF MAJOR INTEREST ARE PREV MEDICINE, INFECTIOUS DISEASES, COMBAT SURGERY INTERNAL MEDICINE, MEDICINE, BIO CHEMISTRY, AND NEUROPSYCHIATRY.

...CURRENT IMPORTANT PROGRAMS

BASIC RESEARCH ON MILITARY DISEASES
MILITARY PREVENTIVE MEDICINE AND TROPICAL DISEASES
DRUG AND VACCINE DEVELOPMENT
MILITARY PERFORMANCE
MICROWAVE HAZARDS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

SOPHISTICATED EQUIPMENT, INCLUDES ELECTRON MICROSCOPES, MASS SPECTROMETER PHYSICAL AND CHEMICAL ANALYTICAL EQUIPMENT, MICROWAVE EXPOSURE SYSTEMS AND BEHAVIORAL RESEARCH INSTRUMENTATION. ADDITIONAL LABORATORY FACILITIES ARE LOCATED IN THAILAND, MALAYSIA, KENYA, BRAZIL, GERMANY, FOREST GLEN, MD. AND FORT DETRICK, MD.

INSTALLATION: WHITE SANDS MISSILE RANGE

WHITE SANDS, N.M.

CDR.MG. ORVILLE L. TOBIASON TECH.DIR.DR. RICHARD H. DUNCAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	123.322	125.923
TOTAL PROCUREMENT	7.940	5.747
TOTAL O&M	4.700	4.716
TOTAL OTHER	3.231	3.288
TOTAL ANNUAL LAB	139.193	139.674
TOTAL INHOUSE	137.939	138.546
TOTAL INHOUSE RDT&E	122.097	124.924
ANNUAL OPERATING COST	33.158	35.808

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PMDS	TOTAL PROF	NON- PROF
MILITARY	930	4	472	458
CIVILIAN	2759	45	1035	1724
TOTAL	3689	49	1507	2182

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
4214377	1422.826	440.747	3020.680	4884.253	183.676	199.573

...MISSION

MISSION—OPERATE A NATIONAL MISSILE RANGE FOR SUPPORT OF ALL APPROVED MISSILE AND RELATED TEST PROGRAMS. INDEPENDENTLY TEST AND EVALUATE ARMY MISSILE AND ROCKET SYSTEMS. ENGINEER AND DEVELOP RANGE INSTRUMENTATION SYSTEMS FOR GATHERING TEST DATA.

...CURRENT IMPORTANT PROGRAMS

TESTING OF DRONE FORMATION CONTROL SYSTEM FOR MULTIPLE ENGAGEMENT AIR DEFENSE. LASER TEST FACILITY INSTRUMENTATION. REAL-TIME VIDEO THEODOLITE DEVELOPMENT. DISTANT OBJECT ATTITUDE MEASUREMENT SYSTEM. TARGET MOTION RESOLUTION PROCESSING TECHNIQUES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

GROUND AND FLIGHT SAFETY. OBTAINING FLIGHT TRAJECTORY AND EVENT DATA. RECOVERING MISSILES OR PORTIONS THEREOF. REDUCING AND PUTTING INTO READABLE FORMS DATA COLLECTED BY RANGE INSTRUMENTS. ENGINEERING AND DEVELOPMENT OF RANGE INSTRUMENTATION. INDEPENDENTLY TEST AND EVALUATE ARMY WEAPONS SYSTEMS. EVALUATE GUIDANCE AND CONTROL SYSTEMS, STRUCTURAL INTEGRITY, PROPULSION SYSTEMS, ELECTROMAGNETIC RADIATION EFFECTS. ANALYSIS OF CHEMICAL AND METALLOGRAPHIC EFFECTS, MICROBIOLOGICAL EFFECTS, CLIMATIC ENVIRONMENTAL EFFECTS. TEST AND EVALUATE WARHEADS AND SPECIAL WEAPONS. WEAPONS SIMULATION. NUCLEAR EFFECTS TESTING. SOLAR FURNACE. COUNTER-COUNTER MEASURES TESTING. ELECTRONIC AND OPTICAL TRACKING SENSORS AND DATA TRANSMISSION REQUIRED TO PROVIDE TEST DATA ON MISSILES AND RELATED PROGRAMS.

INSTALLATION: YUMA PROVING GROUND

YUMA, AZ

CDR. COL. JAMES M. DAVIS, JR. TECH. DIR. RICHARD H. MILLER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	24.245	27.008
TOTAL PROCUREMENT	1.150	0.990
TOTAL O&M	0.267	0.539
TOTAL OTHER	4.838	4.957
TOTAL ANNUAL LAB	30.500	33.494
TOTAL INHOUSE	30.500	33.494
TOTAL INHOUSE RDT&E	24.245	27.008
ANNUAL OPERATING COST	8.597	8.592

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	378	1	53	325
CIVILIAN	574	0	84	490
TOTAL	952	1	137	815

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)				REAL PROP	EQUIP
	LAB	ADMIN	OTHER	TOTAL		
870309	0.832	112.690	1294.613	1408.135	47.288	76.584

...MISSION

PLAN, CONDUCT, SPT ET AIR DEL EQUIP, L-RNGE TUBE ARTY, ACFT WPNS SYS, MOB EQUIP. PLAN, CONDUCT, RPT DESERT ENV TEST. SPT ARCTIC ENV TESTS. PROVIDE TEST, EVAL ADVICE, GUIDANCE TO PROSPECTIVE FACILITY USERS. DEVELOP, MAINT MASTER PLAN FOR INST, FACIL, METHOD, TECH TEST EXPERTISE.

...CURRENT IMPORTANT PROGRAMS

GLOBAL POSITIONING SYSTEM
PROJECTILE 8-INCH XM753
TANK COMBAT XM1
ENHANCED COBRA ARMAMENT PROGRAM
SURFACE LAUNCHED UNIT FUEL AIR EXPLOSIVE

...FUNCTIONS/EQUIPMENT/CAPABILITIES

INSTRUMENTED ARTILLERY RANGE
VEHICLE MOBILITY TEST RANGES AND FACILITY
INSTRUMENTED AIRCRAFT ARMAMENT RANGE
REAL TIME CINETHODOLITE SYSTEM
LASER RANGE TRACKER
POSITION LOCATING DATA COMMUNICATION SYSTEM
INSTRUMENTED DROP ZONES
ENGINEERING TEST FACILITY
INSTRUMENTATION CALIBRATION FACILITY
SCIENTIFIC COMPUTER CENTER
ENVIRONMENTAL TEST FACILITIES
WEAPONS EVALUATION FACILITY

INSTALLATION: AEROSPACE MEDICAL RESEARCH LABORATORY

PENSACOLA, FL.

C.O.CAPT.R.E. MITCHELL

TECH.ADV.DR.A GRAYBIEL

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978	1979
	(ACTUAL)	(ACT + EST)
TOTAL RDT&E	4.876	4.958
TOTAL PROCUREMENT	0.000	0.000
TOTAL OEM	0.108	0.147
TOTAL OTHER	0.858	0.858
TOTAL ANNUAL LAB	5.842	5.963
TOTAL INHOUSE	5.461	5.525
TOTAL INHOUSE RDT&E	4.495	4.520
ANNUAL OPERATING COST	0.911	0.973

PERSONNEL	PERSONNEL DATA (END OF FY 1978)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	PROF	
MILITARY	68	17	22	46	
CIVILIAN	134	19	43	91	
TOTAL	202	36	65	137	

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)				REAL PROP	EQUIP
	LAB	ADMIN	OTHER	TOTAL		
6	167.657	8.800	11.680	188.137	3.130	3.583

...MISSION

CONDUCT RESEARCH DEVELOPMENT TEST AND EVALUATION IN AEROSPACE MEDICINE AND RELATED SCIENTIFIC AREAS APPLICABLE TO AEROSPACE SYSTEMS

...CURRENT IMPORTANT PROGRAMS

PHYSIOLOGICAL AND BEHAVIORAL EFFECTS OF NONIONIZING RADIATION
HUMAN DYNAMIC RESPONSE TO IMPACT ACCELERATION AND VIBRATION
AVIATION PERSONNEL PROCUREMENT SELECTION AND RETENTION
CREW PERFORMANCE IN NAVAL MOTION ENVIRONMENTS
AVIATION VISUAL PERFORMANCE REQUIREMENTS AND CAPABILITIES

...FUNCTIONS/EQUIPMENT/CAPABILITIES

MICROWAVE AND EXTREMELY LOW FREQUENCY NONIONIZING RADIATION FACILITY.
SLOW ROTATION ROOM. CORIOLIS ACCELERATION PLATFORM. HUMAN DISORIENTATION DEVICE. STILL-WERNER CHAIR. OFF VERTICAL ROTATING CHAIR. ANACHOIC AND REVERBERANT CHAMBERS. AUTOMATED PULMONARY FUNCTION. TREADMILL. VECTOR AND ECHOCARDIOGRAPH. THERMOGRAPHIC IMAGING SYSTEM. 3D BINOCULAR EYE-TRACKER AND VISUAL STIMULATOR. ELECTRON MICROSCOPE. IMPACT FACILITY 1 MEGA N THRUST ACCELFATOR. 213 M ENVIRONMENTALLY ENCLOSED TRACK. 178K N THRUST VERTICAL ACCELERATOR. X-RAY CINEMATOGRAPHY. ELECTRODYNAMIC MOTION EXCITORS. C210 SHAKER. SHIP MOTION GENERATOR. 22 CHANNEL INERTIAL DATA ACQUISITION SYSTEM. HIGH SPEED CAMERAS. VIVARIUM WITH OPERATING SUITE. EQUIPPED FOR HUMAN AND ANIMAL EXPERIMENTS IN UNUSUAL FORCE ATMOSPHERIC ACOUSTICAL ELECTROMAGNETIC ENVIRONMENTS.

INSTALLATION: AIR DEVELOPMENT CENTER

JOHNSVILLE, PA.

C.O. CAPT. C. RIGSBEE

TECH. DIR. DR. R.K. LOBB

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	138.964	126.866
TOTAL PROCUREMENT	48.192	66.598
TOTAL O&M	15.001	18.459
TOTAL OTHER	19.629	13.527
TOTAL ANNUAL LAB	221.786	225.450
TOTAL INHOUSE	106.461	83.678
TOTAL INHOUSE RDT&E	67.944	52.371
ANNUAL OPERATING COST	28.629	31.442

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	290	6	76	214
CIVILIAN	2172	28	1094	1078
TOTAL	2462	34	1170	1292

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
831	LAB 825.433	ADMIN 82.888	OTHER 654.549	1562.870	32.958	41.758

...MISSION

TO BE THE PRINCIPAL NAVY RDT&E CENTER FOR NAVAL AIRCRAFT SYSTEMS
LESS AIRCRAFT LAUNCHED WEAPON SYSTEMS

...CURRENT IMPORTANT PROGRAMS

TACTICAL SUPPORT CENTER
S-3A, F-14, F-18, VP PROGRAM
LIGHT AIRBORNE MULTI-PURPOSE SYSTEMS
V/STOL
J-TIDS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

AIRCRAFT SYSTEMS SIMULATION, AIRBORNE SEARCH & RESCUE, INERTIAL
NAVIGATION TECHNOLOGY, AIR VEHICLE TECHNOLOGY STRUCTURES, MATERIALS,
FLIGHT DYNAMICS, PERFORMANCE, FLIGHT CONTROL, AIRBORNE ASW SYSTEMS.
DEVELOP & INTEGRATION OF AIRBORNE SYSTEMS INCLUDING ELECTRONIC
SURVEILLANCE & COUNTER MEASURES, COMMUNICATIONS, NAVIGATION INFORMATION
PROCESSING & DISPLAY, ENVIRONMENTAL SENSING, ELECTROMAGNETIC/MAGNETIC,
ACOUSTIC, ELECTRO-OPTIC, & PHOTOGRAPHIC, A/C SUPPORT SYSTEMS, A/C COST
METHODOLOGY AND LOGISTICS, AEROSPACE MEDICINE AND AVIATION PHYSIOLOGY
AND SUPPORT TO OTHER ACTIVITIES AS DIRECTED

INSTALLATION: AIR ENGINEERING CENTER

LAKEHURST, N.J.

C. O. CAPT. J. H. HOGANSON

TECH. DIR. MR. W. J. COX

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	16.857	0.000
TOTAL PROCUREMENT	29.889	0.000
TOTAL O&M	20.251	0.000
TOTAL OTHER	11.551	0.000
TOTAL ANNUAL LAB	78.548	0.000
TOTAL INHOUSE	57.179	0.000
TOTAL INHOUSE RDT&E	10.544	0.000
ANNUAL OPERATING COST	6.700	0.000

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	284	0	34	250
CIVILIAN	1893	3	442	1451
TOTAL	2177	3	476	1701

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
7377	467.945	204.247	2144.783	2816.975	96.255	20.413

...MISSION

CNDCT RSRCH, ENGR, DEV, DEV T&E, SYS INTGRN, LTD PROD, PROC & FLET ENGR
SUPRT IN: A/C LAUNCHG, RCVR & LNDG AID SYS & GRND SUPRT EQIP FOR A/C &
A/BRN WPNS SYS. PRVD, OPER & MATN SITES FOR TESTS OF ABV EQIP. SUPRT DOD
STD & SPECS PRGMS. OPER AVIA FACILITIES AS DESGNTD BY APPRO AUTH.

...CURRENT IMPORTANT PROGRAMS

RECOVERY SYSTEM FOR HELICOPTERS ABOARD SHIP (RAST)
TRIBOLOGY (STUDY OF WEAR) TECHNOLOGY BASE PROGRAM
AUTOMATIC TEST EQUIPMENT FOR AVIONICS SUPPORT AND AVIONICS READINESS
MARK 14 RECOVERY SYSTEM
HELO RECOVERY ASSIST, SECURE AND TRAVERSING (RAST) ABOARD SHIP TEST

...FUNCTIONS/EQUIPMENT/CAPABILITIES

TEST CATAPULTS, ARRESTING GEAR AND SLED TRACKS FOR SYSTEM AND COMPONENT
TESTS. INSTRUMENTATION AND DATA PROCESSING. HELO AND VTOL RECOVERY TEST
SITES. VLA TEST SITES. MOCKUP OF AIR LAUNCHED WEAPONS HANDLING AND
STOWAGE FACILITIES ON AIRCRAFT CARRIERS. AIRCRAFT CARRIER OPERATIONAL
ANALYSIS ROOM FOR STUDYING SPOTTING AND SERVICING CAPABILITIES ON FLIGHT
AND HANGAR DECKS. MACHINE SHOP WITH CONVENTIONAL AND AUTOMATED MACHINE
TOOLS CAPABLE OF PROTOTYPE AND LIMITED PRODUCTION. VACUUM FURNACE FOR
HEAT TREATING. ELECTRON BEAM WELDER. CRYOGENICS FACILITY. RAPID LOAD
TEST MACHINE. TRIBOLOGY (STUDY OF WEAR) LABORATORY. NOISE MEASUREMENT
LAB. ULTRASONIC CLEANING LAB. AVIONICS SUPPORT FACILITY. ELECTRIC POWER
AND ELECTRONIC SUPPORT FACILITY. NONDESTRUCTIVE EVALUATION LAB. AUTO-
MATIC TEST EQUIPMENT SOFTWARE FACILITY.

INSTALLATION: AIR PROPULSION CENTER

TRENTON, N.J.

C.O. CAPT. B.T. ALLIGOOD, JR.

TECH. CON. MR. B.T. MCWILLIAMS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	23.045	30.021
TOTAL PROCUREMENT	2.078	4.573
TOTAL O&M	0.256	0.040
TOTAL OTHER	0.807	1.539
TOTAL ANNUAL LAB	26.186	36.173
TOTAL INHOUSE	19.641	26.379
TOTAL INHOUSE RDT&E	16.809	21.688
ANNUAL OPERATING COST	4.518	6.431

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	8	0	8	0
CIVILIAN	594	0	155	439
TOTAL	602	0	163	439

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
68	376.704	37.973	211.766	626.443	50.820	11.993

...MISSION

PROVIDE NAVAIR & FLEET COMPLETE TECHNICAL & ENGINEERING SUPPORT FOR AIR-BREATHING PROPULSION SYSTEMS; ACCESSORIES, COMPONENTS AND FUELS & LUBES. MANAGE AND PERFORM APPLIED R&D ON NEW PROPULSION SYSTEMS. EVALUATE NEW SYSTEMS BY T&E ASSURE MISSION ACCOMPLISHMENT AND SOLVE FLEET PROBLEMS.

...CURRENT IMPORTANT PROGRAMS

CRUISE MISSILE ENGINE F107 DEVELOPMENT & QUALIFICATION TESTING
F404-GE-400 ENGINE DEVELOPMENT & QUALIFICATION TESTING
UH-1N AIRCRAFT TRANSMISSION FAILURE INVESTIGATION
TF30-P-414A ENGINE 1000-HOUR MISSION ENDURANCE FOR F-14A AIRCRAFT
PETROLEUM & SYNTHETIC AIRCRAFT ENGINE FUEL DEVELOPMENT & TESTING

...FUNCTIONS/EQUIPMENT/CAPABILITIES

THREE LARGE ALTITUDE CELLS, TWO LARGE SEA LEVEL CELLS AND FOUR SMALL ALTITUDE CELLS PROVIDE ENVIRONMENTAL AND FLIGHT SIMULATION CAPABILITY OF SEA LEVEL TO 100000 FEET; MINUS 65 TO PLUS 650 DEGREES F, FLIGHT SPEEDS FROM ZERO TO MACH 3 TO TEST TURBOJET/FAN AND TURBOPROP/SHAFT ENGINES. SEVEN TEST ROOMS TEST STARTERS, ACCESSORIES AND AUXILIARY POWER UNITS. EIGHT TEST ROOMS AND CHEMISTRY LAB USED FOR R&D ON FUELS, LUBES AND BEARINGS. SPECIAL TEST FACILITIES ARE ROTOR SPIN FACILITY, HELICOPTER TRANSMISSION STAND, GYRO RIG, ENGINE TURNABLE AND DEMISTER TEST CELL. FACILITIES ARE USED FOR R&D ON ADVANCED FUELS AND LUBRICATING OILS, OIL-WETTED ENGINE COMPONENTS, AIR POLLUTION, LOW CYCLE FATIGUE, CONTAINMENT, NOISE AND I/R PROGRAMS. NAPC QUALS OILS, MANAGES NAVY EXPLORATORY AND ADV DEVEL PRGMS, PROVIDES ADMN & TECH DIR TO SELECTED NAVAIR CONTRACTS.

INSTALLATION: AIR TEST CENTER

PATUXENT RIVER, MD.

C.O. RADN. J. H. FOXGROVER

TECH. DIR. MR. J. B. PARADIS

PROGRAM DATA BY FISCAL YEAR (MILLION \$)

PROGRAM	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	64.080	79.746
TOTAL PROCUREMENT	16.290	15.408
TOTAL O&M	8.321	14.468
TOTAL OTHER	26.155	22.273
TOTAL ANNUAL LAB	114.846	131.893
TOTAL INHOUSE	95.104	102.869
TOTAL INHOUSE RDT&E	51.379	62.445
ANNUAL OPERATING COST	47.983	56.312

PERSONNEL DATA (END OF FY 1978)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	1455	3	295	1160
CIVILIAN	2114	7	455	1659
TOTAL	3569	10	750	2819

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)	COST (MILLION \$)
	LAB ADMIN OTHER TOTAL	REAL PROP EQUIP
6638	15.125 363.400 4560.589 4939.114	159.868 22.489

...MISSION

CONDUCT TECH EVALS & BIS TRIALS, TRAIN TEST PILOTS, TEST & EVALUATE TOTAL A/C, THEIR MISSION SYSTEMS & ALL SUBSYSTEMS & COMPONENTS, RELATED SUPPORT SYSTEMS & ILS. PROVIDE TECHNICAL ADVICE & ASSISTANCE TO NASC & OTHERS TO TRAIN TEST PILOTS & TO DEVELOP A/C TESTING TECHNOLOGY.

...CURRENT IMPORTANT PROGRAMS

PRINCIP SITE FOR T & E OF A/C & THEIR SYMS F14, F18, A4, A6, A7E, A6, AV8, LAMPS, P3, EP3F, F2, FC130, AH1, UH1, CH46, CH53, SH2, SH3 PLUS THEIR ASSOCIATED SIMULATORS. GROUND SUPPORT EQUIP, A/C COMPUTERS & SOFTWARE, RELIABILITY & MAINTAINABILITY, HUMAN FACTORS, ELECTRONIC WARFARE CAPABILITIES, ELECTROMAGNETIC COMPATIBILITY, CARRIER SUIT, ACLS MLS A/C CARRIER & AIRFLD CERTIFICATIONS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

LARGE RESTRICTED AIRSPACE, REAL-TIME RANGE & AIRCRAFT TEST DATA PROCESSING CATAPULT & ARRESTING GEARS, ACLS SITES, ELECTROMAGNETIC SHIELDED HANGAR, GUN FIRING TUNNELS, ENVIRONMENTAL TESTING FACILITIES, ELECTRICAL POWER AND CONTROL TESTING LABS, INSTRUMENTED SONOBUOY RANGE, ASW SYSTEMS LABS, BIOMEDICAL & HUMAN FACTORS LABS, EXTENSIVE INSTRUMENTATION DESIGN & CONSTRUCTION FACILITIES, COMPUTER & SOFTWARE T&E LABS, WATER EDGE LOW ELECTROMAGNETIC NOISE TEST AREA, ELECTRO-OPTICAL TARGETS & TEST RANGE, ENGINE TEST CELL & THRUST STAND, BROADBAND FW TEST RANGE, VSTOL TEST SITE, SURFACE EFFECT SHIP TEST FACILITY.

INSTALLATION: ARCTIC RESEARCH LABORATORY

BARROW, AK.

C.O. LCDR. MICHAEL BROWN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	8.828	9.360
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.050	0.060
TOTAL OTHER	1.691	1.233
TOTAL ANNUAL LAB	10.569	10.653
TOTAL INHOUSE	0.055	0.056
TOTAL INHOUSE RDT&E	0.000	0.000
ANNUAL OPERATING COST	5.086	5.942

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHOS	TOTAL PROF	NON- PROF
MILITARY	3	0	2	1
CIVILIAN	0	0	0	0
TOTAL	3	0	2	1

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET) LAB	ADMIN	OTHER		REAL PROP	EQUIP
4973	45.706	15.987	341.075	402.768	35.000	0.000

...MISSION

PROVIDE ALL FACILITIES AND SERVICES FOR ACCOMPLISHING PROGRAMS OF BASIC AND APPLIED RESEARCH WHICH CONTRIBUTE TO SUCCESSFUL NAVY OPERATIONS IN THE ARCTIC REGIONS AND ENVIRONMENT.

...CURRENT IMPORTANT PROGRAMS

STUDY PHYSICAL PROPERTIES, OPTICAL CHARACTERISTICS AND CHEMICAL COMPOSITION OF ARCTIC AEROSOLS.
CONSTRUCT SEDIMENT DISTRIBUTION CHART OF THE ARCTIC BASIN.
DEVELOP RELATIONSHIPS BETWEEN ICE, AIR AND WATER OF THE ARCTIC OCEAN.
STUDY THE PHYSICAL OCEANOGRAPHY OF THE BARENTS AND KARA SEAS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

THE FACILITY CONSISTS OF 116 SEMI-PERMANENT AND PERMANENT BUILDINGS INCLUDING A LABORATORY-ADMINISTRATION-BILLETING BUILDING WHICH HAS 43 LABORATORY SPACES, SLEEPING QUARTERS FOR 100 PEOPLE, ADMIN OFFICES, GAME ROOM, MUSEUM OF ARCTIC FAUNA AND ARCHEOLOGY AND A LIBRARY OF POLAR ORIENTED PUBLICATIONS. THE LAB PROVIDES FACILITIES MAINTENANCE, UTILITY GENERATION AND DISTRIBUTION, MOTOR VEHICLE OPERATION AND MAINTENANCE, FIRE PROTECTION AND SECURITY, JANITORIAL SERVICE, COMMUNICATIONS, AIRPORT OPERATION, MEDICAL SUPPORT, FOOD SERVICE, AND PROVISION OF SPECIAL SERVICES, INCLUDING LAUNDRY, RECREATION AND RESALE ACTIVITIES. THE LABS CAPABILITY INCLUDES LIMITED SUPPORT OF MILITARY OPERATIONS IN THE ARCTIC INCLUDING SEARCH AND RESCUE.

INSTALLATION: ATLANTIC FLEET WEAPONS TRAINING FACILITY

ROOSEVELT ROADS, P.R

C.O.CAPT.E.W.INGLEY

DEV.ENG.CHIEF MR. TOMAS RAMIREZ

PROGRAM DATA BY FISCAL YEAR (MILLION \$)

PROGRAM	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	0.286	0.280
TOTAL PROCUREMENT	3.457	4.400
TOTAL C&M	9.267	9.574
TOTAL OTHER	1.897	1.957
TOTAL ANNUAL LAB	14.907	16.211
TOTAL INHOUSE	3.402	3.482
TOTAL INHOUSE RDT&E	0.156	0.155
ANNUAL OPERATING COST	0.954	0.883

PERSONNEL DATA (END OF FY 1978)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	100	0	27	73
CIVILIAN	34	0	34	0
TOTAL	134	0	61	73

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
3602	0.000	14.957	154.005	168.962	10.717	92.007

...MISSION

TO OPERATE, MAINTAIN AND DEVELOP WEAPONS TRAINING FACILITIES AND SERVICES IN DIRECT SUPPORT OF THE TRAINING OF FLEET FORCES AND OTHER ACTIVITIES, AND FOR THE DEVELOPMENT, TEST AND EVALUATION OF WEAPONS SYSTEMS.

...CURRENT IMPORTANT PROGRAMS

MOBILE SEA RANGE DEVELOPMENT SUPPORT
DD-963 CLASS POST DELIVERY TESTING SUPPORT
ANTI-SHIP MISSILE DEFENSE
HARPOON TESTING SUPPORT
SUBMARINE SILENCING PROGRAM

...FUNCTIONS/EQUIPMENT/CAPABILITIES

NAVY'S LARGEST TRAINING GRND FOR ATLANTIC FORCES WITH 202,000 SQ.NM. COMBINED SEA AREA FOR AIR, SURFACE AND SUBSURFACE WARFARE OPERATIONS. CENTRAL COMMAND AND CONTROL SYSTEM WITH NTDS LINKING, REALISTIC FW ENVIRONMENT. SURVEILLANCE/TRACK RADARS, AIR/SURFACE TARGET PRESENTATION, LARGE SCREEN DISPLAY SYSTEM FOR OPS MONITOR/CONTROL, EVENT RECONSTRUCTION, AND VARIOUS INSTRUMENTATION SYSTEMS BASED AROUND A UNIVAC 1230 COMPUTER SYSTEM WITH EXTENDED CORE MEMORY UNIT. FLTAC FIELD STATION FOR MISSILE ANALYSIS AND EVALUATION. AIR TO GRND AND SURFACE TO SURFACE WEAPONS TARGET FACILITIES FOR CONVENTIONAL AIRCRAFT ORDNANCE DELIVERY, STRAFING AND NAVAL GUNFIRE WITH RADAR, TV BOMB SCORING SYSTEM AND OTHER SCORING/SPOTTING SYSTEMS. UNDERWATER RANGE FOR PRECISION SURFACE AND SUBSURFACE TRACKING, WSATS AND FORACS. NAVSTA PROVIDES FOR AIRCRAFT/SHIPS LOGISTIC SUPPORT, BOQ AND BFO.

INSTALLATION: BIOSCIENCES LABORATORY

OAKLAND, CA.

C.O. CAPT. J.F. PRIBNOW

SCI. DIR. DR. N.A. VEDROS

PROGRAM DATA BY FISCAL YEAR (MILLION \$)

PROGRAM	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	2.164	2.110
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.946	0.593
TOTAL ANNUAL LAB	3.110	2.703
TOTAL INHOUSE	0.869	0.783
TOTAL INHOUSE RDT&E	0.556	0.430
ANNUAL OPERATING COST	0.468	0.430

PERSONNEL DATA (END OF FY 1978)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	18	1	6	12
CIVILIAN	6	0	0	6
TOTAL	24	1	6	18

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
5	77.625	8.731	34.646	121.002	1.000	5.400

...MISSION

CONDUCTS RESEARCH IN MICROBIOLOGY AIMED AT THE PREVENTION AND CONTROL OF DISEASES OF NAVAL PERSONNEL UNDER ISOBARIC, HYPERBARIC AND HYPOBARIC CONDITIONS AS WELL AS NORMAL AND UNUSUAL BREATHING MIXTURES. ALSO CONDUCTS RESEARCH ON POLLUTION CONTROL AND ABATEMENT.

...CURRENT IMPORTANT PROGRAMS

WORK ON SURVIVAL OF ENTEROPATHOGENS IN SEA WATER
DETERMINE DISEASES OF MARINE MAMMALS OF IMPORTANCE TO THE NAVY
DEVELOP BIOINDICATOR ORGANISMS THAT CAN SERVE AS POLLUTION INDICATORS
USE OF MICRO-ORGANISMS FOR BIODEGRADATION OF POLLUTANTS IN SEAWATER
ISOLATE AND IDENTIFY ANTIBACTERIAL AND ANTIVIRAL SUBSTANCES FROM THE SEA

...FUNCTIONS/EQUIPMENT/CAPABILITIES

EQUIPMENT INCLUDES MINIATURE DEEP FREEZE AND MINIATURE FIELD INCUBATORS FOR VIRUS ISOLATION, ROTATING DRUM USED TO INVESTIGATE EFFECT OF LIGHT ON AEROSOLIZED MICROORGANISMS AND PHOTOCHEMICAL REACTIONS, A HYPERBARIC TEST FACILITY, MICROAEROFLUOROMETER USED TO TRACK AEROSOL CLOUDS AND CLASS IV CONTAINMENT FACILITIES FOR HANDLING EXTREMELY PATHOGENIC VIRUS AND BACTERIA, CONTINUOUS FLOW LIQUID WASTE DECONTAMINATION UNIT, PROCESS AIR DECONTAMINATION SYSTEM, MOVABLE 400 LITER AEROSOL TEST CHAMBERS, MOBILE VIROLOGY LABORATORY AND VARIOUS EXPOSURE AND HOLDING SYSTEMS FOR SMALL ANIMALS. THE RESEARCH EQUIPMENT IS CONTINUOUSLY BEING MODIFIED AND EXPANDED IN ORDER TO MAINTAIN A LAB THAT IS RESPONSIVE TO THE TOTAL BIOLOGICAL NEEDS OF THE NAVY.

INSTALLATION: BLOOD RESEARCH LABORATORY

CHELSEA, MA.

C.O. CAPT. CESARE R. VALERI

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL ROT&E	0.887	0.183
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.176	0.037
TOTAL ANNUAL LAB	1.063	0.220
TOTAL INHOUSE	1.063	0.220
TOTAL INHOUSE ROT&E	0.887	0.183
ANNUAL OPERATING COST	0.305	0.078

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	10	3	3	7
CIVILIAN	9	0	2	7
TOTAL	19	3	5	14

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
1	14.720	7.360	8.300	30.380	0.500	1.216

...MISSION

CONDUCT RESEARCH AND DEVELOP METHODS FOR LONG-TERM PRESERVATION OF BLOOD AND BLOOD PRODUCTS AND EVALUATION OF USEFULNESS IN OPERATIONAL AREAS ON LAND, AT SEA, AND IN HOSPITALS

...CURRENT IMPORTANT PROGRAMS

WHITE CELL- AND PLATELET-POOR RED CELLS FOR THERAPEUTIC TRANSFUSION
EVALUATE METHODS FOR REJUVENATING INDATED AND OUTDATED RED CELLS
EVALUATE METHODS FOR PRESERVING PLATELETS, WHITE CELLS, AND STEM CELLS
CLINICAL EVALUATION OF FROZEN RED CELLS AND PLATELETS
EVALUATE NEW METHODS FOR COLLECTING WHITE CELLS, PLATELETS & STEM CELLS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

STORAGE CAPABILITY FOR 6500 UNITS OF FROZEN BLOOD
LIQUID AND FREEZE PRESERVATION EQUIPMENT FOR RED CELLS, WHITE CELLS, PLATELETS, PLASMA PROTEIN, AND STEM CELLS
EQUIPMENT TO BIOLOGICALLY EVALUATE THE VIABILITY AND FUNCTION OF RED CELLS
EQUIPMENT TO BIOLOGICALLY EVALUATE THE VIABILITY AND FUNCTION OF WHITE CELLS AND STEM CELLS
EQUIPMENT TO BIOLOGICALLY EVALUATE THE VIABILITY AND FUNCTION OF PLATELETS

INSTALLATION: CIVIL ENGINEERING LABORATORY

PORT HUENEME, CA.

C.O.CAPT. RONALD P. COPE

TECH.DIR. MR. WILLIAM F. BURKART

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	20.853	27.237
TOTAL PROCUREMENT	5.650	0.555
TOTAL O&M	1.476	1.650
TOTAL OTHER	1.229	1.260
TOTAL ANNUAL LAB	29.208	30.702
TOTAL INHOUSE	11.790	13.763
TOTAL INHOUSE RDT&E	9.606	11.329
ANNUAL OPERATING COST	2.771	3.114

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	16	1	8	8
CIVILIAN	300	27	160	140
TOTAL	316	28	168	148

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
30	117.980	27.061	46.181	191.222	2.000	2.393

...MISSION

MISSION OF LABORATORY IS TO BE THE PRINCIPAL NAVY ROTE CENTER FOR SHORE AND FIXED SURFACE AND SUBSURFACE OCEAN FACILITIES AND FOR THE NAVY AND MARINE CORPS CONSTRUCTION FORCES.

...CURRENT IMPORTANT PROGRAMS

NAVY SHORE FACILITIES SUPPORT, NAVY SEAFLOOR INSTALLATIONS, AMPHIBIOUS AND ADVANCED BASE TECHNOLOGY. ENVIRONMENTAL PROTECTION. ORGANIC MATERIALS. ENERGY TECHNOLOGY. DEEP OCEAN TECHNOLOGY. OFFSHORE BULK FUEL TRANSFER. INDEPENDENT EXPLORATORY DEVELOPMENT. INDEPENDENT RESEARCH. CONTAINER OFF-LOADING TRANSFER SYSTEM

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PRESSURE VESSEL FACILITY WITH 72-INCH-ID BY 10 FT. DEEP PRESSURE VESSEL SUSTAINING PRESSURES UP TO 5500 PSI. DIVING LOCKER AND EQUIPMENT FOR 10 DIVERS. SEAFLOOR SOILS, MATERIALS, ENERGY TEST BED, METALLURGICAL, PHOTO-ELASTIC, PHYSICAL SECURITY LABS, WARPING TUG, CORER FOR TAKING SAMPLE AT WATER DEPTHS TO 6000 FT., INSITU TESTING EQUIPMENT FOR DEEP OCEAN INCLUDING A VANE SHEAR DEVICE CONE PENETROMETER, 10 FT. CORER PLATE BEARING TEST DEVICE AND FOUNDATION MONITOR. PHOTOGRAPHIC FACILITY. ENVIRONMENTAL PROTECTION MONITORING CAPABILITY. CDC 8090 COMPUTER/TERMINAL WITH A HIGH SPEED READER AND LINE PRINTER. DIGITAL MAG TAPE T/O ANALOG TAPE. ADC AND DAC CONVERSION AND A PEN PLOTTER AND TIE WITH CDC-6600. ENERGY MONITORING ABILITY.

INSTALLATION: CLOTHING & TEXTILE RESEARCH FACILITY

NATICK, MA.

C.O.CDR.D.S.PARSONS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	0.758	1.060
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	1.092	1.067
TOTAL OTHER	0.029	0.029
TOTAL ANNUAL LAB	1.879	2.156
TOTAL INHOUSE	1.519	1.989
TOTAL INHOUSE RDT&E	0.758	1.060
ANNUAL OPERATING COST	0.121	0.132

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	1	0	1	0
CIVILIAN	56	1	37	19
TOTAL	57	1	38	19

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
1	LAB 10.000	ADMIN 7.000	OTHER 3.000	20.000	0.440	0.850

...MISSION

CONDUCT RESEARCH, DEVELOPMENT, TEST, AND EVALUATION AND GIVE ENGINEERING SUPPORT IN CLOTHING, TEXTILES, AND RELATED FIELDS ASSOCIATED WITH SERVICE CLOTHING AND ENVIRONMENTAL AND PROTECTIVE CLOTHING

...CURRENT IMPORTANT PROGRAMS

SEA ENVIRONMENT PROTECTIVE CLOTHING
FLAME-RETARDANT MATERIALS AND CLOTHING CONCEPTS
DIVERS INSULATED UNDERWEAR
ENERGY CONVERSION SYSTEM FOR PROTECTIVE CLOTHING
SHIPBOARD DAMAGE CONTROL CLOTHING

...FUNCTIONS/EQUIPMENT/CAPABILITIES

MAJOR FUNCTIONS--

CONDUCT RDT&E IN TEXTILE MATERIALS, LEATHER, PLASTICS, AND RUBBER
DEVELOP NAVY CLOTHING, ACCESSORIES, AND RELATED ITEMS
CONDUCT STUDIES IN ENVIRONMENTAL SCIENCES AND LIFE SUPPORT SYSTEMS
PREPARE SPECIFICATIONS FOR CLOTHING, TEXTILES, FOOT WEAR & RELATED ITEMS
COORDINATE STANDARDIZATION IN CLOTHING
PROVIDE TECHNICAL SUPPORT TO ALL DOD AGENCIES IN NAVY CLOTHING AREAS

MAJOR EQUIPMENT AND FACILITIES--

TEXTILE LABORATORIES
COLD TEST CHAMBERS
HYDRO-ENVIRONMENT SIMULATOR
HIGH-INTENSITY THERMAL TEST UNIT.

INSTALLATION: COASTAL SYSTEMS CENTER

PANAMA CITY, FL.

C.D.CAPT.JAMES V.JOLLIFF

TECH.DIR.MR.GERALD G. GOULD

PROGRAM DATA BY FISCAL YEAR (MILLION \$)

PROGRAM	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	28.925	41.088
TOTAL PROCUREMENT	3.052	2.242
TOTAL O&M	5.882	5.266
TOTAL OTHER	3.593	2.538
TOTAL ANNUAL LAB	41.452	51.134
TOTAL INHOUSE	22.578	33.612
TOTAL INHOUSE RDT&E	14.603	25.010
ANNUAL OPERATING COST	7.954	8.597

PERSONNEL DATA (END OF FY 1978)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	113	1	8	105
CIVILIAN	641	21	275	366
TOTAL	754	22	283	471

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)	COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL REAL PROP EQUIP
682	345.947	38.150	247.630	631.727 31.358 16.559

...MISSION

TO BE THE PRINCIPAL NAVY ACTIVITY FOR CONDUCTING RDT&E IN SUPPORT OF NAVAL MISSIONS AND OPERATIONS THAT TAKE PLACE PRIMARILY IN THE COASTAL (CONTINENTAL SHELF) REGIONS

...CURRENT IMPORTANT PROGRAMS

DIVING & SALVAGE
MINE COUNTERMEASURES
ACOUSTIC & TORPEDO COUNTERMEASURES
COASTAL OPERATIONS SUPPORT
COASTAL TECHNOLOGY R&D & ADVANCED CRAFT T&E

...FUNCTIONS/EQUIPMENT/CAPABILITIES

OCEAN SIMULATION FAC. HYDROSPACE LAB. HYDRODYNAMIC PRESSURE SIMULATOR.
SWIMMER/DIVER R&D FAC. WET SUBMERSIBLE VEHICLE FAC. GAS ANALYSIS LAB.
TWO OFFSHORE PLATFORMS WITH LIVING QUARTERS FOR 30 & 4 PEOPLE. MAGNETIC
TARGET DETECTION & CLASSIFICATION RANGE. SYSTEMS DEVELOPMENT & TEST FAC.
MAGNETIC LAB. CALIBRATION & STANDARDS FAC. MECHANICAL CALIBRATION LAB.
OPTICAL POSITIONING SYSTEM. POST RUN ANALYSIS SYSTEM. PORTABLE TRACKING.
ELECTRONIC TRACKING RANGE. ACOUSTIC TEST POOL. PRECISION ACOUSTIC TANK.
ACOUSTIC ANALYSIS FAC. ENVIRONMENTAL MONITORING SYSTEM. COUNTERMEASURES
EVALUATOR. BURROUGHS B-5700 DIGITAL COMPUTER. LOW FREQUENCY HYDROPHONE
CALIBRATION FAC. TRANSDUCER LAB & CALIBRATION FAC. MODEL TOWING BASIN.
INDUSTRIAL SHOPS. PIER SPACE & BOATS TO INCLUDE RESEARCH VESSEL, ATHENA.
MSO-443, USS FIDELITY. HELIPORT COMPLEX WITH 3 RH53D & 2 UH1F HELOS.

INSTALLATION: DAVID W. TAYLOR SHIP R&D CENTER

BETHESDA, MD.

C. O. CAPT. M.V. RICKETTS

TECH. DIR. DR. A. POWELL

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	99.867	111.758
TOTAL PROCUREMENT	3.186	9.655
TOTAL O&M	25.063	18.014
TOTAL OTHER	16.973	18.539
TOTAL ANNUAL LAB	145.089	157.966
TOTAL INHOUSE	115.636	125.284
TOTAL INHOUSE RDT&E	78.958	88.533
ANNUAL OPERATING COST	36.281	42.696

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	77	0	22	55
CIVILIAN	2570	125	1202	1368
TOTAL	2647	125	1224	1423

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)				REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
325	1620.739	126.879	287.109	2034.727	71.007	52.625

...MISSION

TO BE THE PRINCIPAL NAVY RDT&E CENTER FOR NAVAL VEHICLES AND LOGISTICS, AND TO PROVIDE RDT&E SUPPORT TO THE U.S. MARITIME ADMINISTRATION AND THE MARITIME INDUSTRY.

...CURRENT IMPORTANT PROGRAMS

SUBMARINE SILENCING, TARGET STRENGTH REDUCTION, SUBMARINE MANEUVERING, PRESSURE HULLS, PROPELLER DESIGN, ELECTRIC PROPULSION, CIRCULATION CONTROL ROTORS AND WINGS, ENERGY CONSERVATION AND SOURCES, HIGH STRENGTH STEEL, HYDROFOILS, SWATH, SURVIVABILITY, AND LOGISTICS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PLAN AND CONDUCT RDT&E FOR NAVAL VEHICLES SHIPS, SUBMARINES & AIRCRAFT AND SUPPORT THE OPERATING FORCES IN THE AREAS OF SHIP'S SYSTEMS DEVELOPMENT AND TECHNOLOGY, HYDRODYNAMICS, STRUCTURES, ACOUSTICS, PROPULSION AND AUXILIARY MACHINERY SYSTEMS, SHIP'S MATERIALS ENGINEERING, COMPUTER-AIDED SHIP DESIGN, AIRBORNE AERODYNAMICS AND LOGISTICS. FACILITIES INCLUDE: SHALLOW AND DEEP WATER TOWING BASINS, MANEUVERING & SKEEPPING BASIN, WIND TUNNELS, ANECHOIC FLOW FACILITY, WATER TUNNELS, STRUCTURAL EVALUATION LAB, UNDERWATER EXPLOSIONS LABORATORY BARGE, SEVERAL LARGE PRESSURE TANKS, SUBMARINE INTERNAL FLUID DYNAMICS FACILITY, METALLURGICAL CHARACTERIZATION AND EVALUATION FACILITY, WELDING DEVELOPMENT LABORATORY, AND MACHINERY DEVELOPMENT LABORATORY.

INSTALLATION: DENTAL RESEARCH INSTITUTE,NTC

GREAT LAKES,IL.

C.O.CAPT.M.R.WIRTHLIN JR.

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	0.593	0.633
TOTAL PROCUREMENT	0.000	0.000
TOTAL OEM	0.000	0.000
TOTAL OTHER	0.548	0.537
TOTAL ANNUAL LAB	1.141	1.170
TOTAL INHOUSE	1.141	1.170
TOTAL INHOUSE RDT&E	0.593	0.633
ANNUAL OPERATING COST	0.250	0.260

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	28	3	10	18
CIVILIAN	16	3	7	9
TOTAL	44	6	17	27

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
0	22.025	4.815	13.355	40.195	0.000	0.647

...MISSION

TO CONDUCT RESEARCH,DEVELOPMENT,TEST,AND EVALUATION IN DENTAL AND ALLIED SCIENCES, WITH PARTICULAR EMPHASIS ON PROBLEMS OF DENTAL AND ORAL HEALTH IN NAVY AND MARINE CORPS POPULATIONS ASHORE,AFLOAT AND IN THE FIELD

...CURRENT IMPORTANT PROGRAMS

EVALUATION OF DENTAL IMPLANTS
PROCEDURES FOR TREATMENT OF DENTAL PULP DISEASE
WOUND HEALING OF SUPPORTING TISSUES
NAVY DENTAL TECHNICIAN UTILIZATION
DENTAL EQUIPMENT DEVELOPMENT AND EVALUATION OF FLEET HEALTH

...FUNCTIONS/EQUIPMENT/CAPABILITIES

AMINO ACID ANALYZER/ATOMIC ABSORPTION UNIT/FLOURIDE ELECTRODES/
SCINTILLATION COUNTER/MINI COMPUTER/GAS CHROMATOGRAPH UNIT/FOUR DENTAL
UNITS/FOUR DENTAL CHAIRS/TRANSMISSION ELECTRON MICROSCOPE

INSTALLATION: ENVIRONMENTAL PREDICTION RESEARCH FACILITY MONTEREY, CA.

C.O.CAPT.P.A.PETIT

RSCH.DIR.DR.A. WEINSTEIN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	2.918	2.091
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.213	0.226
TOTAL ANNUAL LAB	3.131	2.317
TOTAL INHOUSE	1.409	1.737
TOTAL INHOUSE RDT&E	1.196	1.511
ANNUAL OPERATING COST	0.454	0.504

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	14	0	6	8
CIVILIAN	41	7	30	11
TOTAL	55	7	36	19

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
0	1.362	4.858	10.594	16.814	0.000	0.883

...MISSION

CONDUCT RESEARCH AND DEVELOPMENT DIRECTED TOWARD PROVIDING OBJECTIVE LOCAL, REGIONAL AND GLOBAL ENVIRONMENTAL ANALYSIS AND PREDICTION TECHNIQUES. PROVIDE PLANNING, MODELING AND EVALUATION SERVICES FOR DETERMINING THE EFFECT OF ENVIRONMENTAL ELEMENTS ON NAVAL WEAPON SYSTEMS.

...CURRENT IMPORTANT PROGRAMS

DEVELOP TECHNIQUES FOR PROCESS/DISPLAY OF ENVIRONMENTAL SATELLITE DATA
DEVELOP COMPUTER MODELS TO ANALYZE/ASSIMILATE ATMOSPHERIC DATA
DEVELOP TECHNIQUES TO PREDICT/DIAGNOSE ATMOS EFFECTS ON WEAPON SYSTEMS
DEVELOP OBJECTIVE LOCAL/REGIONAL ATMOS. ANALYSIS/PREDICTION TECHNIQUES
DEVELOP SYNOPTIC, SUBSYNOPTIC AND MESOSCALE ATMOS. PREDICTION MODELS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

DATACRAFT/5 COMPUTER
TWO NOVA 2 COMPUTERS
WANG 2200 COMPUTER
TWO TEKTRONIX 4051 COMPUTER TERMINALS
ACCESS TO ONE CDC CYBER 75 COMPUTER
ACCESS TO THREE CDC 6500 COMPUTERS
ELECTRONIC MAINTENANCE SHOP
PHOTOGRAPHIC LABORATORY
TWO TI 733 DUAL CASSETTE COMPUTER TERMINALS
THREE TI 735 PORTABLE COMPUTER TERMINALS
FOUR LEAR-SIEGLER ADM-3A COMPUTER TERMINALS
THREE TI 745 PORTABLE COMPUTER TERMINALS

INSTALLATION: EXPLOSIVE ORDNANCE DISPOSAL FACILITY

INDIAN HEAD, MD.

C.O.CDR. W.S.CADOW

TECH DIR.MR.L.A.DICKENSON

PROGRAM DATA BY FISCAL YEAR (MILLION \$)

PROGRAM	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	4.667	4.566
TOTAL PROCUREMENT	0.615	0.615
TOTAL O&M	2.773	4.072
TOTAL OTHER	0.847	0.690
TOTAL ANNUAL LAB	8.902	9.943
TOTAL INHOUSE	5.569	6.448
TOTAL INHOUSE RDT&E	2.592	2.347
ANNUAL OPERATING COST	2.392	2.547

PERSONNEL DATA (END OF FY 1978)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	50	0	8	42
CIVILIAN	165	2	45	120
TOTAL	215	2	53	162

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1087	34.681	16.936	49.985	101.602	3.952	2.339

...MISSION

CONDUCT RESEARCH, DEVELOPMENT, TEST AND EVALUATION CONCERNING BOTH THE DISPOSAL AND RENDERING-SAFE PROCEDURES FOR CONVENTIONAL AND SPECIAL WEAPONS, GUIDED MISSILES, UNDERWATER WEAPONS, EXPLOSIVES, BIO AND CHEM. MUNITIONS, BOTH U.S. AND FOREIGN, PLUS THE REQUIRED TOOLS AND EQUIPMENT.

...CURRENT IMPORTANT PROGRAMS

RANGE CLEARANCE AND DISPOSAL TECHNIQUES
REMOTE CASE ENTRY SYSTEMS
IMPROVISED EXPLOSIVE DEVICE COUNTERMEASURES
EXPLOSIVE CONTAINMENT STUDY
EOD DIVER BREATHING SYSTEM

...FUNCTIONS/EQUIPMENT/CAPABILITIES

DEVELOP EXPLOSIVE ORDNANCE DISPOSAL -EOD- PROCEDURE, PREPARE AND PUBLISH EOD PUBLICATIONS FOR JOINT SERVICE USE. CONDUCT EXP. AND ADV. DEVELOPMENT LEADING TO SPECIALIZED TOOLS AND EQUIP. NEEDED TO LOCATE, IDENTIFY, RECOVER, RENDER-SAFE AND DISPOSE OF ALL TYPES OF EXPLOSIVE ORDNANCE. PREPARE AND MAINTAIN DOCUMENTATION FOR EOD TOOLS AND EQUIP. CONDUCT FIRST ARTICLE INSPECTION ON EOD TOOLS BEING PROCURED FOR ALL SERVICES. CONDUCT IN-SEARCH ENGINEERING FUNCTIONS FOR EOD AND SWIMMER WEAPONS SYSTEM TOOLS. CONDUCT INITIAL EVALUATION OF FOREIGN EXPLOSIVE ORDNANCE. MAINTAIN, STOCK AND ISSUE EOD PUBLICATIONS FOR JOINT-SERVICE USE. CAPABILITY OF TESTING EOD TOOLS TO A DEPTH OF 400 FT IN A DIVING CHAMBER

INSTALLATION: HEALTH RESEARCH CENTER

SAN DIEGO, CA.

C.O. CAPT. RICHARD H. RAHF

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	2.378	2.600
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.592	0.625
TOTAL ANNUAL LAB	2.970	3.225
TOTAL INHOUSE	2.565	2.925
TOTAL INHOUSE RDT&E	1.973	2.300
ANNUAL OPERATING COST	0.416	0.375

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	35	8	10	25
CIVILIAN	86	10	31	55
TOTAL	121	18	41	80

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1	11.177	4.500	0.000	15.677	1.880	0.491

...MISSION
CONDUCT RSCH AND DEVELOPMENT ON MEDICAL AND PSYCHOLOGICAL ASPECTS OF
HEALTH AND PERFORMANCE OF NAVAL SERVICE PERSONNEL AND TO PERFORM
SUCH OTHER FUNCTIONS OR TASKS AS MAY BE DIRECTED BY CHIEF BUMED

...CURRENT IMPORTANT PROGRAMS
MORBIDITY FORECASTING
PSYCHOLOGICAL DEFENSES, COPING IN THE NAVAL RECRUIT
STUDY OF SLEEP PATTERNS/STRESS
MEDICAL/PSYCHOLOGICAL RESPONSES TO PROLONGED STRESS
RAPID DIAGNOSIS USING ANTIGEN-ANTIBODY REACTIONS

...FUNCTIONS/EQUIPMENT/CAPABILITIES
ELECTROENCEPH MONITORING OF SLEEP PATTERNS
CARDIOVASCULAR STRESS TESTING LAB
MUSCLE STRENGTH TESTING LAB
RADIOIMMUNO - ASSAY CAPABILITY
SERUM AUTO-ANALYSIS
MICROBIOLOGY DIAGNOSTIC KITS
COMPUTER STORAGE-TOTAL USN/USMC HEALTH DATA
COMPLETE HEALTH DATA FOR ENLISTED WOMEN
STUDIES OF SUBMERSIBLES
BIOCHEMICAL CORRELATES OF STRESS

INSTALLATION: MEDICAL RESEARCH INSTITUTE

BETHESDA, MD.

C.O. CAPT. WALTER F. MINER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&F	10.597	11.441
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	3.454	3.644
TOTAL ANNUAL LAB	14.051	15.085
TOTAL INHOUSE	13.308	14.864
TOTAL INHOUSE RDT&F	9.854	11.220
ANNUAL OPERATING COST	6.386	4.336

PERSONNEL	PERSONNEL DATA (END OF FY 1978)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	251	63	86		165
CIVILIAN	241	39	83		358
TOTAL	492	102	169		323

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
4	145.868	9.400	40.299	195.567	3.887	1.479

...MISSION

CONDUCT BASIC & APPLIED RESEARCH &
DEVELOPMENT CONCERNED WITH THE HEALTH
SAFETY & EFFICIENCY OF NAVY
PERSONNEL

...CURRENT IMPORTANT PROGRAMS

TISSUE TYPING ORGAN TRANSPLANTS & IMMUNOSUPPRESSION IN RESTORATIVE SURG
BASIC & APPLIED MICROBIOLOGY & VACCINE DEV TO CONTROL MALARIA & SCHISTO
BASIC MECHANISM OF BACTERIAL & TRAUMATIC SHOCK HEAT STRESS & TOXIC MAT
PSYCHOLOGICAL AND PHYSIOLOGICAL EFFECTS OF HYPERBARIC ENVIRONMENT
MECHANISMS OF ORAL PLACQUE DISEASE & TREATMENT OF ORAL DISEASE & TRAUMA

...FUNCTIONS/EQUIPMENT/CAPABILITIES

ENVIRONMENTAL HEALTH EFFECT LAB INCLUDE MAN-RATED & ANIMAL HYPER CHAMB
HUMAN PHYSIOLOGICAL & HEAT STRESS EQUIPMENT & FACILITIES
HUMAN TISSUE PRESERVATION & STORAGE EQUIPMENT & FACILITIES
BIOHAZARDOUS MATERIALS HANDLING LAB EQUIPMENT & FACILITIES
TOXICOLOGY EVALUATION EQUIP & FACILITIES INCLUDE HYPERBARIC CHAMBERS
TRANSMISSION & SCANNING ELECTRON MICROSCOPES FLUORESCENT ANTIBODY CELL
SORTER & COMPUTER
EXPERIMENTAL ANIMAL FACILITIES ANIMAL HOUSE & OPERATING ROOMS
LAB EQUIPMENT & FACILITIES FOR BASIC & APPLIED BIOCHEMICAL
MICROBIOLOGICAL & PSYCHOLOGICAL STUDIES

INSTALLATION: MEDICAL RESEARCH UNIT NO.2

TAIPEI, TAIWAN

C.O. CAPT. KURT SORENSEN

SCI. DIR. DR. JOHN CROSS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	1.864	1.942
TOTAL PROCUREMENT	0.000	0.000
TOTAL OEM	0.000	0.000
TOTAL OTHER	0.695	0.734
TOTAL ANNUAL LAB	2.559	2.676
TOTAL INHOUSE	2.430	2.540
TOTAL INHOUSE RDT&E	1.864	1.942
ANNUAL OPERATING COST	0.697	0.637

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	31	9	12	19
CIVILIAN	5	2	3	2
TOTAL	36	11	15	21

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
20	32.882	16.075	48.364	97.321	0.101	0.804

...MISSION

CONDUCT RESEARCH AND DEVELOPMENT IN THE BIOMEDICAL SCIENCES, PROVIDE DATA ON INFECTIOUS DISEASES AND MEDICAL PROBLEMS OF MILITARY SIGNIFICANCE, RECOMMEND CONTROL MEASURES AND PROVIDE TRAINING IN RESEARCH METHODS AND TECHNIQUES.

...CURRENT IMPORTANT PROGRAMS

PREVALENCE AND DISTRIBUTION OF INFECTIOUS DISEASES IN ASIA. RESEARCH ON FILIARIASIS IN INDONESIA AND PHILIPPINES. EXPERIMENTAL AND IMMUNOLOGICAL STUDIES ON SCHISTOSOMIASIS AND FILIARIASIS. ASSOCIATION OF HEPATITIS B VIRUS AND LIVER DISEASE. EPIDEMIOLOGY AND ECOLOGY OF ARTHROPOD BORNE DISEASES IN ASIA.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

CLINICAL STUDIES ON DIAGNOSIS AND TREATMENT OF TROPICAL DISEASES, EPIDEMIOLOGICAL STUDIES ON INFECTIOUS DISEASES ENDEMIC AND EPIDEMIC IN ASIA. ADEQUATE LAB FACILITIES FOR STUDIES ON VIRAL, BACTERIAL, PARASITIC AND ARTHROPOD BORNE DISEASES, LAB ANIMAL CARE FACILITIES, BIOCHEMISTRY AND PATHOLOGY LABS. RADIOISOTOPE EQUIPMENT, COMPUTER CAPABILITY

INSTALLATION: MEDICAL RESEARCH UNIT NO.3

CAIRO, EGYPT

C. O. CAPT. RAYMOND H. WATTEN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	1.807	2.274
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.498	0.480
TOTAL ANNUAL LAB	2.305	2.754
TOTAL INHOUSE	2.256	2.610
TOTAL INHOUSE RDT&E	1.758	2.130
ANNUAL OPERATING COST	0.000	0.000

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	27	5	10	17
CIVILIAN	61	3	36	25
TOTAL	88	8	46	42

ACRES	SPACE AND PROPERTY				COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP	
5	41.068	8.962	25.729	75.759	1.074	0.711	

...MISSION

TO CONDUCT RESEARCH AND DEVELOPMENT ON INFECTIOUS DISEASES OF MILITARY IMPORTANCE THAT ARE ENDEMIC OR EPIDEMIC IN ITS ASSIGNED GEOGRAPHICAL AREA; AND, TO PERFORM SUCH OTHER FUNCTIONS AS MAY BE DIRECTED BY THE CHIEF, BUREAU OF MEDICINE AND SURGERY.

...CURRENT IMPORTANT PROGRAMS

MENINGITIS STUDY
PATHOPHYSIOLOGY OF SCHISTOSOMIASIS
ARTHROPOD VIRUS ISOLATIONS IN TICKS, MOSQUITOES, SANDFLIES
RIFT VALLEY EPIDEMIOLOGY, ECOLOGY, VIROLOGY, AND TREATMENT
IMMUNOLOGY OF HUMAN SCHISTOSOMIASIS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

TECHNICIAN TISSUE PROCESSOR, HEWLETT PACKARD MODEL 9100 CALCULATOR, PICKER NUCLEAR MAGNASCANNER, PERKIN-ELMER ATOMIC ABSORPTION SPECTROPHOTOMETER, PERKIN-ELMER GAS CHROMATOGRAPH, COULTER BLOOD CELL COUNTER, CARDIOGRAPH, AO FLUORESCENT MICROSCOPE, GUILFORD MODEL 240 SPECTROPHOTOMETER, AMSCO AUTOCLAVES, BLOOD GAS APPARATUS, ANALYTIC SCANNER AND INTEGRATOR, UNICOM UV SPECTROPHOTOMETER, REVCO FREEZERS, METTLER BALANCES, CLIMATIZER, INDUSTRIAL REFRIGERATORS, DUCON MICROSCOPE, COLONOSCOPE, INCUBATOR, EDGE CARD HOOD, AUTOMATIC PIPETTER, MICROTOME, PATIENTS WARD TO HOSPITALIZE SICK EGYPTIANS, PUBLIC WORKS FACILITY, WORLD'S MOST COMPLETE TICK COLLECTION AND MODERN LABORATORY TO STUDY DISEASES IN EGYPT, ILLUMINATOR OUTFIT, OIL-FIRED PORTABLE HOT HIGH PRESSURE CLEANER, MEDICAL LIBRARY.

INSTALLATION: NATIONAL PARACHUTE TEST RANGE

EL CENTRO, CA.

C.O. CAPT. E.D. LIGHTER

TECH. DIR. MR H.C.FISH

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RD&E	7.817	8.696
TOTAL PROCUREMENT	1.070	0.400
TOTAL O&M	1.024	1.032
TOTAL OTHER	4.706	3.693
TOTAL ANNUAL LAB	14.617	13.821
TOTAL INHOUSE	14.168	13.536
TOTAL INHOUSE RD&E	7.777	8.656
ANNUAL OPERATING COST	3.061	4.105

PERSONNEL	PERSONNEL DATA (END OF FY 1978)				NON-PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	243	1	19		224
CIVILIAN	268	0	25		243
TOTAL	511	1	44		467

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
484608	6.400	56.670	1142.407	1205.477	33.061	20.519

...MISSION

CONDUCT RD&E AND FOLLOW-ON ENGINEERING OF AERODYNAMIC DECELERATORS, ASSOCIATED SYSTEMS, ASSEMBLIES AND EQUIPMENT. AND TO PROVIDE COMMON RANGE, TECHNICAL AND BASE SUPPORT FOR UNITS OF OPERATING FORCES OF THE NAVY AND OTHER DOD APPROVED USERS.

...CURRENT IMPORTANT PROGRAMS

US-10S MARTIN BAKER ESCAPE SYSTEM FOR F-18
 QUALIFICATION TEST OF SPACE SHUTTLE BOOSTER RECOVERY SYSTEM
 SEAPAC WATER ACTUATED PRCHTE RELEASE
 PHYSIOLOGICAL RESEARCH - G EFFECT ON HEAD AND NECK
 TAV BA/B ESCAPE SYSTEM

...FUNCTIONS/EQUIPMENT/CAPABILITIES

DROP TEST RANGE LAND AND SALT WATER- SPACE POSITIONING PHOTO CCTV
 TELEMETRY INSTRUMENTATION- ADP FOR RANGE DATA- PARAMETERS SEA LEVEL TO 80KFT ENGINEERING SERVICES- EXPLORATORY DEVELOPEMENT ADVANCED AND BASIC DESIGN IN SERVICE ENGINEERING MATERIALS TESTING LAB PHYSIOLOGICAL EVAL.
 EQUIPMENT- PHOTO LAB STILL AND MOTION- 16MM TO 70MM AND COLOR 5000 FPS.
 AIRCRAFT- TRANSPORT DELIVERY LOW TO HIGH SPEED- VEHICLE DELIVERY- AIR TO AIR PHOTO COVERAGE- EJECTION SEAT TEST BED- PERSONNEL DELIVERY.
 INDUSTRIAL SHOPS- MACHINE SHOP- MODEL MAKING- VEHICLE AND PROTOTYPE PARACHUTE AND HARDWARE FABRICATION- CARPENTRY- WOODWORKING PAINTING METAL FABRICATION FOR WELD, BEND, HEAT TREAT AND MAGNAFLUX

INSTALLATION: OCEAN R & D ACTIVITY

BAY ST. LOUIS, MS.

C.O. CAPT. C. G. DARRELL

TECH. DIR. DR. R. R. GOODMAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	22.620	30.972
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.275	0.498
TOTAL OTHER	1.162	1.875
TOTAL ANNUAL LAB	24.057	33.345
TOTAL INHOUSE	11.900	14.259
TOTAL INHOUSE RDT&E	11.032	13.040
ANNUAL OPERATING COST	3.423	3.786

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	10	1	10	0
CIVILIAN	230	35	133	97
TOTAL	240	36	143	97

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
5	27.454	18.633	17.749	63.836	9.000	3,200

...MISSION

TO CARRY OUT A BROAD BASED RDT&E PROGRAM IN OCEAN SCIENCE AND TECHNOLOGY WITH EMPHASIS ON UNDERSTANDING OCEAN PROCESSES THRU MEASUREMENT AND ANALYSIS, AND THE EFFECTS OF THIS OCEAN ENVIRONMENT ON NAVY SYSTEMS AND OPERATIONS. TACTICAL ASW ENVIRONMENTAL ACOUSTICS SUPPORT PROGRAM.

...CURRENT IMPORTANT PROGRAMS

ACOUSTIC BOTTOM INTERACTION PROGRAM IN SUPPORT OF DEEP OCEAN SURVEILLANCE
OCEAN FORECASTING STUDIES TO DEVELOP MATHEMATICAL PREDICTION MODELS.
DEV TECHNIQUES TO EXTRACT OCEAN ENVIRON DATA FROM SATELLITE SENSORS.
VERSATILE EXPERIMENTAL KEVLAR ARRAY - DEPLOYABLE ACOUSTIC ARRAY.
TIME SCALE OCEANOGRAPHY AND INSTRUMENTATION DEVELOPMENT PROGRAM.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

WAVE-CURRENT INTERACTION SIMULATION FACILITY. INTERACTIVE DIGITAL
SATELLITE IMAGE PROCESSING SYSTEM TO HANDLE DATA FROM ALL IMAGING,
SATELLITES. DEEP OCEAN SEDIMENT CORE AND DREDGE SAMPLE DEPOSITORY-172R
S.Q. F.T. .VEKA IS A HYDROPHONE, 3P PRESSURE SENSOR, 310 METER APERATURE
KEVLAR ARRAY WHICH CAN BE DEPLOYED IN VARIOUS MODES FOR EXPERIMENTAL
MEASUREMENTS. X-RAY FLOURESCENCE, TRANSMISSION AND SCANNING. ELECTRON
MICROSCOPE FACILITY.

INSTALLATION: OCEAN SYSTEMS CENTER

SAN DIEGO, CA.

C. O. CAPY. R. R. GAVAZZI

TECH.DIR.DR.H.L. BLOOD

PROGRAM DATA BY FISCAL YEAR (MILLION \$)

PROGRAM	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	135.895	155.181
TOTAL PROCUREMENT	27.744	24.386
TOTAL O&M	35.854	31.375
TOTAL OTHER	8.522	6.910
TOTAL ANNUAL LAB	208.015	218.052
TOTAL INHOUSE	104.998	125.690
TOTAL INHOUSE RDT&E	75.274	90.901
ANNUAL OPERATING COST	39.780	41.679

PERSONNEL DATA (END OF FY 1978)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	321	1	132	189
CIVILIAN	2493	165	1239	1254
TOTAL	2814	166	1371	1443

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)	COST (MILLION \$)
	LAB ADMIN OTHER	TOTAL REAL PROP EQUIP
3637	1300.727 213.808 183.555	1698.090 36.549 122.829

...MISSION

TO BE THE PRINCIPAL NAVY RESEARCH, DEVELOPMENT, TEST AND EVALUATION CENTER FOR COMMAND CONTROL, COMMUNICATIONS, OCEAN SURVEILLANCE, SURFACE AND AIR LAUNCHED UNDERSEA WEAPON SYS, AND SUPPORTIVE TECHNOLOGIES.

...CURRENT IMPORTANT PROGRAMS

OCEAN SURVEILLANCE SYS WITH SOSUS UPDATE AND MULTI-SENSOR INTEGRATION
COMMAND CONTROL AND COMMUNICATIONS SYS ARCHITECTURE AND ENGINEERING
ADVANCED SURFACE AND AIR LAUNCHED UNDERSEA WEAPON AND FIRE CONTROL SYS
TECHNOLOGY DEVELOPMENTS SUCH AS ADV MARINE BIO SYS, EXTERNAL STOWAGE
AND LAUNCH, ARCTIC SUB OPS, OCEAN ENGINEERING AND ELECTRONIC WARFARE

...FUNCTIONS/EQUIPMENT/CAPABILITIES

FACILITIES AT SAN DIEGO AND HAWAII LABS INCLUDE ARCTIC RESEARCH FACILITY; MICROWAVE AND MILLIMETER WAVE ANTENNA PATTERN RANGE COMPLEX; OCEANOGRAPHIC RESEARCH TOWER; STABLE SEMI-SUBMERGED PLATFORM; UNMANNED UNDERWATER TETHERED VEHICLES INCLUDING CURV III, SCAT, RUMS, AND SNOOPY; USS DOLPHIN, EXPERIMENTAL SUB; TRANSDUCER EVALUATION CENTER; ELECTRONICS DEVELOPMENT AND TEST LAB; MICROELECTRONICS LAB COMPLEX; ACOUSTIC SIGNAL DATA ANALYSIS AND CONVERS SYSTEM; SIMULATION AND REAL-TIME COMPUTER FACILITY FOR DEVELOPMENT OF ASW SYSTEMS; SHIP MOTION SIMULATOR; AND A BIO-SCIENCE FACILITY ENGAGED IN RESEARCH, TRAINING, AND HANDLING OF MARINE MAMMALS. OFF-STATION FACILITIES INCLUDE A DEEP WATER TRANSDUCER CALIBRATION FACILITY IN IDAHO AND VERY LOW FREQUENCY SOUNDING SITE IN ARIZONA

INSTALLATION: ORDNANCE MISSILE TEST FACILITY

WHITE SANDS, N.M.

C.O. CAPT. M.A. PETERSON JR. CH. ENG. MR. H.L. HENDON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	2.935	4.147
TOTAL PROCUREMENT	0.324	0.012
TOTAL OEM	0.079	0.177
TOTAL OTHER	1.574	1.282
TOTAL ANNUAL LAB	4.912	5.618
TOTAL INHOUSE	3.111	2.710
TOTAL INHOUSE RDT&E	1.595	1.574
ANNUAL OPERATING COST	0.943	1.049

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PMDS	TOTAL PROF	NON- PROF
MILITARY	96	1	34	62
CIVILIAN	54	0	4	50
TOTAL	150	1	38	112

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)				REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
88	108.566	30.539	78.694	217.799	5.404	9.988

...MISSION

SUPPORT THE NAVY GUIDED MISSILE AND RESEARCH ROCKET PROGRAMS INCLUDING GROUND AND FLIGHT TESTING, ASSIST JOINT SERVICE LASER GUIDED WEAPONS COUNTERMEASURE TEST, PARTICIPATE IN THE OPERATION OF THE DOD INTEGRATED MISSILE TEST RANGE AT WHITE SANDS

...CURRENT IMPORTANT PROGRAMS

STANDARD MISSILE 1 AND 2/AEGIS FLIGHT TESTING
CRUISE MISSILE FLIGHT TESTING
RAM FLIGHT TESTING
VERTICAL LAUNCHER TESTING
UPPER ATMOSPHERE RESEARCH ROCKET LAUNCHING

...FUNCTIONS/EQUIPMENT/CAPABILITIES

FLIGHT TEST TERRIER/TARTAR/STANDARD/SAM GUIDED MISSILES AND PROJECTILES
LAUNCH AEROBEE 150, 170, 200, ARIES, STROBEE F, D, BLACK BRANT ORION
AND VARIOUS OTHER SOUNDING ROCKETS FOR UPPER ATMOSPHERIC STUDY
CONDUCT NAVY AIR WEAPONS TESTS
LAUNCH VARIOUS ROCKETS IN SUPPORT OF NASA PROJECTS
LAUNCH VARIOUS ROCKETS IN SUPPORT OF AIR FORCE PROJECTS
CONDUCT VARIOUS DEVELOPMENT TESTS FOR SSN AND SAM PROJECTS
PROVIDE DRONE SUPPORT
ASSIST IN OPEVAL OF CRUISE MISSILE
MAINTAIN TARGET ECM EQUIPMENT
5-INCH GUIDED PROJECTILE LAUNCH CAPABILITY
PROVIDE WARHEAD AND EOD ANALYSIS ARENA

INSTALLATION: PACIFIC MISSILE TEST CENTER

POINT MUGU, CA.

C.O. CAPT. J.C. WEAVER

TECH. DIR. MR. T.P. PERRY

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	79.186	115.735
TOTAL PROCUREMENT	57.234	65.678
TOTAL O&M	32.943	34.466
TOTAL OTHER	44.540	58.646
TOTAL ANNUAL LAB	213.903	274.525
TOTAL INHOUSE	134.819	174.873
TOTAL INHOUSE RDT&E	55.430	81.014
ANNUAL OPERATING COST	16.752	21.904

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	1061	3	270	791
CIVILIAN	3890	9	1204	2686
TOTAL	4951	12	1474	3477

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
27084	912.309	395.689	3514.572	4822.570	142.415	140.762

...MISSION

PERFORM DEVELOPMENT TEST AND EVALUATION, DEVELOPMENT SUPPORT, FOLLOW-ON ENGINEERING AND LOGISTICS AND TRAINING SUPPORT FOR NAVAL WEAPONS, SYSTEMS AND RELATED DEVICES. PROVIDE RANGE TECHNICAL AND BASE SUPPORT FOR FLEET USERS AND OTHER DEFENSE AND GOVERNMENT AGENCIES.

...CURRENT IMPORTANT PROGRAMS

TOMAHAWK CRUISE MISSILE
HARPOON ANTI-SHIPING MISSILE
PHOENIX AIR-TO-AIR MISSILE
F-14 TACTICAL SOFTWARE
TRIDENT SUBMARINE-LAUNCHED BALLISTIC MISSILE

...FUNCTIONS/EQUIPMENT/CAPABILITIES

LABORATORIES-WEAPON SIMULATION, SYSTEM INTEGRATION, ENVIRONMENTAL, ANACHOIC, ELECTRONIC COUNTERMEASURE, SOFTWARE SUPPORT. AIR AND SURFACE TRACKING RANGE-45000 SQUARE MILES/RADARS-FPS-16, FPQ-10, FPQ-12, MPS-75/ THEODOLITES AND SINE SEXTANTS. RECEIVE, RECORD AND DISPLAY P, L AND S BAND TELEMETRY. REAL-TIME AND POST OPERATIONAL DATA REDUCTION FACILITIES. MISSILE AND TARGET LAUNCH PLATFORMS AND FACILITIES. COMMAND, CONTROL AND DESTRUCT FACILITIES. SHIP MOTION SIMULATION. USNS WHEELING-TRACKING, TELEMETRY, COMMAND, CONTROL AND DESTRUCT SHIP. MISSILE IMPACT LOCATION AND MISS-DISTANCE INDICATOR SYSTEMS. ALL-UP ROUND MISSILE TEST FACILITY. UNDERWATER TRACKING RANGE-1000 SQUARE MILES, 3-DIMENSIONAL 400-6000 FATHOMS.

INSTALLATION: PERSONNEL RESEARCH & DEVELOPMENT CENTER

SAN DIEGO, CA.

C.O. CAPT. D.F. PARKER

TECH. DIR. DR. J.J. REGAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	14.092	13.223
TOTAL PROCUREMENT	0.392	0.301
TOTAL O&M	3.283	1.657
TOTAL OTHER	2.031	1.182
TOTAL ANNUAL LAB	19.798	16.363
TOTAL INHOUSE	9.022	9.506
TOTAL INHOUSE RDT&E	6.860	7.337
ANNUAL OPERATING COST	2.642	2.913

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	24	1	9	15
CIVILIAN	265	78	195	70
TOTAL	289	79	204	85

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
1	56.500	7.080	0.000	63.580	0.387	2.176

...MISSION

PRINCIPLE NAVY ACTIVITY FOR CONDUCTING HUMAN RESOURCES RDT&E IN THE AREAS OF MANPOWER PERSONNEL EDUCATION AND TRAINING AND TO SERVE AS THE COORD ACTIVITY FOR ALL SUCH RDT&E FOR THE NAVY. PROVIDE SUPPORT TO CNM ACTIVITIES TO AUGMENT HUMAN FACTORS EFFORTS IN DEVELOPMENT OF NEW SYSTEM

...CURRENT IMPORTANT PROGRAMS

PERSONNEL ACQUISITION UTILIZATION AND EFFECTIVENESS
HUMAN PERFORMANCE IN NAVY SYSTEMS
PERSONNEL EDUCATION AND TRAINING
PERSONNEL MANPOWER MANAGEMENT
MANAGEMENT SYSTEMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

GENERAL AUTOMATION 18/30 COMPUTER SYSTEM WITH REMOTE JOB ENTRY TO OTHER COMPUTER CENTERS PDP 12 LABORATORY INSTRUMENT CONTROL SYSTEM PDP 11/47 AUTOMATED TESTING AND TRAINING SYSTEM TEKTRONIC GRAPHIC TERMINALS INTERFACING WITH NAVAL OCEAN SYSTEMS CENTER UNIVAC 1100 MAXICOMPUTER PLATO IV TERMINALS INTERFACING WITH COMPUTER AT U OF ILLINOIS

INSTALLATION: RESEARCH LABORATORY

WASHINGTON, D.C.

C. O. CAPT E. F. HENIFIN

RSCH.DIR.DR. ALAN BERMAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	178.272	191.962
TOTAL PROCUREMENT	1.699	4.533
TOTAL O&M	11.847	8.598
TOTAL OTHER	15.434	16.439
TOTAL ANNUAL LAB	207.252	221.532
TOTAL INHOUSE	161.382	170.922
TOTAL INHOUSE RDT&E	132.402	141.352
ANNUAL OPERATING COST	49.075	54.932

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	146	0	32	114
CIVILIAN	3357	585	1554	1803
TOTAL	3503	585	1586	1917

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
798	2321.146	192.496	491.794	3005.436	91.892	88.917

...MISSION

TO CONDUCT A BROADLY BASED MULTIDISCIPLINARY PROGRAM OF SCIENTIFIC RESEARCH AND ADVANCED TECHNOLOGICAL DEVELOPMENT DIRECTED TOWARD NEW AND IMPROVED MATERIALS, EQUIPMENT, TECHNIQUES, SYSTEMS, AND RELATED OPERATIONAL PROCEDURES FOR THE NAVY

...CURRENT IMPORTANT PROGRAMS

NATO SEAGNAT
EFFECTIVENESS OF NAVAL ELECTRONICS WARFARE SYSTEMS
ADVANCED ACOUSTIC ANTI-SUBMARINE WARFARE SURVEILLANCE PROGRAM
SATELLITE PROGRAMS
ADVANCED HIGH PERFORMANCE MATERIALS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PRINCIPAL RESEARCH AND DEVELOPMENT LABORATORY OF THE NAVY. PRIMARY AREAS ARE MATERIALS SCIENCE AND TECHNOLOGY, SPACE SCIENCE AND TECHNOLOGY, RADAR, ELECTRONIC WARFARE, LASER TECHNOLOGY, OPTICS, OPTICAL WARFARE, ELECTRONIC DEVICES, PLASMA AND NUCLEAR PHYSICS, INTELLIGENCE SUPPORT, UNDERSEA SURVEILLANCE, OCEAN SCIENCE AND TECHNOLOGY. MAJOR FACILITIES INCLUDE ONE SHIP FOR ACOUSTIC ASW RESEARCH, OCEANOGRAPHY, AND DEEP OCEAN SEARCH. MAJOR ACOUSTIC STANDARD AND CALIBRATION FACILITIES. HIGH LEVEL RADIATION LABORATORY. THREE NUCLEAR PARTICLE ACCELERATORS. DIVERSE HIGH ENERGY LASERS. 200 KILOGAUSS HIGH FIELD MAGNET FACILITY. SPACE SIMULATION FACILITIES. MAJOR PLASMA PHYSICS FACILITIES. ELECTRONIC WARFARE CENTRAL TARGET SIMULATOR.

INSTALLATION: SUBMARINE MEDICAL RESEARCH LABORATORY

GROTON, CT.

C. O. CDR. R. A. MARGULIES

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	1.797	1.668
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.069	0.019
TOTAL OTHER	0.483	0.489
TOTAL ANNUAL LAB	2.349	2.176
TOTAL INHOUSE	2.349	2.176
TOTAL INHOUSE RDT&E	1.797	1.668
ANNUAL OPERATING COST	0.560	0.584

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	32	7	12	20
CIVILIAN	69	11	32	37
TOTAL	101	18	44	57

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
1	40.514	14.099	0.000	54.613	1.105	1.769

...MISSION

TO CONDUCT BASIC AND APPLIED RESEARCH IN SUBMARINE AND DIVING MEDICINE CLOSED ENVIRONMENT IN AREAS OF PHYSIOLOGY, PSYCHOLOGY, VISION, AUDITION, HUMAN FACTORS, MILITARY APPLICATIONS, TO MEET NAVY REQUIREMENTS. FURNISH RESEARCH AND MEDICAL SUPPORT TO SUB AND DIVING SHORE AND FLEET COMMANDS.

...CURRENT IMPORTANT PROGRAMS

DYSBARIC OSTEONECROSIS IN NAVAL DIVERS
SATURATION-EXCURSION AIR DIVES IN SHALLOW DEPTHS
COMPUTER ASSISTED DIAGNOSIS PROGRAMS FOR CORPSMEN ABOARD NUCLEAR SUBS
AUDITORY AND VISUAL TESTS AND EVALUATION OF SUBMARINERS AND DIVERS
HUMAN FACTORS EVALUATION OF CREWS IN SUBMARINE INFORMATION PROCESSING

...FUNCTIONS/EQUIPMENT/CAPABILITIES

BASIC AND APPLIED RESEARCH COMPETENCE IN CARDIOPULMONARY, THERMAL, AND HYPERBARIC PHYSIOLOGY, BIOCHEMISTRY, AUDITION, VISION, HUMAN FACTORS ENG., PERSONNEL ASSESSMENT, HYPERBARIC AND MECHANICAL SERVICES, ELECTRICAL INSTRUMENTATION AND REPAIRS, COMPUTER APPLICATIONS, VETERINARY SCIENCES, SUB. MED. RESEARCH LIBRARY, GRAPHIC ARTS, PHOTOGRAPHY, MODEL MAKING, HYPERBARIC CHAMBERS, HUMAN-150 PSI, ANIMAL-300 AND 1000 PSI, ENVIR. CONTROL CHAMBERS, MEDICAL EXAM SUITE, SURGICAL SUITE COMPUTER APPLICATION FACILITY, CLOSED CIRCUITRY SYSTEM, GAS CHROMATOGRAPHS, EEG, DOPPLER SYSTEM, SONAR STACK SIMULATION TEST SYSTEM, FLUIDIC CONTROL CONSOLF, AIR ION MONITORING SYSTEM, UNDERWATER TV SYSTEM.

INSTALLATION: SURFACE WEAPONS CENTER

SILVER SPRING, MD.

C. O. CAPT. P. L. ANDERSON

TECH.DIR.MR. J.E. COLVARD

PROGRAM DATA BY FISCAL YEAR (MILLION \$)

PROGRAM	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	165.652	184.356
TOTAL PROCUREMENT	42.544	29.787
TOTAL OEM	36.698	34.000
TOTAL OTHER	25.096	23.678
TOTAL ANNUAL LAB	269.991	271.821
TOTAL INHOUSE	134.317	157.999
TOTAL INHOUSE RDT&E	87.614	101.341
ANNUAL OPERATING COST	60.572	65.520

PERSONNEL DATA (END OF FY 1978)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	125	2	44	81
CIVILIAN	4763	239	1936	2827
TOTAL	4888	241	1980	2908

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
5381	1672.370	153.791	971.765	2797.926	93.726	86.152

...MISSION

THE PRINCIPAL NAVY RESEARCH, DEVELOPMENT & EVALUATION CENTER FOR SURFACE SHIP WEAPONS SYSTEMS, ORDNANCE, MINES, AND STRATEGIC SYSTEMS SUPPORT

...CURRENT IMPORTANT PROGRAMS

STRATEGIC SYSTEMS-TRIDENT, POSEIDON, POLARIS, MK300 REENTRY BODY, SAFETY.
AFGIS COMBAT SYSTEMS LEAD CENTER, TERRIER, TARTAR, STANDARD MISSILE SYSTEM.
GUN SYSTEMS-MK71, MK75, MK45, HIFRAG AMMO, PHALANX CIWS, GUIDED AMMO, USMC SYS
UNDERWATER WEAPONS-TORPEDO MK48, MINES, MK60, CAPTOR, QUICKSTRIKE, PRAM, SLMM.
ELECTROMAGNETIC SYSTEMS-ARM COUNTERMEASURES, INTEL COLL, OTH/DC&T, FLT SUP.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

FACILITIES INCLUDE-WIND TUNNELS TO MACH 20, BALLISTIC RANGES, 1.75 MILLION GAL. HYDROBALLISTIC TANK, MAGNETIC STRUCTURE FACILITY FOR SHIP & SUB MODEL & SATELLITES, FBW DISC/PAC PRODUCTION FACILITY, FACILITIES FOR ASSURANCE OF COMPUTER PROGRAMS FOR STRATEGIC AND TACTICAL MISSILE SYS, INTELLIGENCE PROCESSING SYS, GUNNERY AND MISSILE RANGE COMPLEX INCLUDING LAND-BASED DEVELOPMENT SITES FOR WEAPON CONTROL SYS, ELECTROMAGNETIC VULNERABILITY FACILITIES BOTH NUCLEAR & NON-NUCLEAR EFFECTS, FACILITIES FOR WARHEAD CHARACTERIZATION & DAMAGE TO TARGETS, DEVELOP & TEST FACILITIES FOR LASER AND ELECTRO-OPTICS SUBSYSTEMS, NONDESTRUCTIVE TESTING FACILITIES, OFFP WATER OFFSHORE FACILITIES FOR MINE SYS MOBILE TACTICAL WAR GAME FAC, EXPLOSIVES DEVELOPMENT FACILITIES, EXTENSIVE SCIENTIFIC COMPUTER FACILITY FUZES, EXPLOSIVES, MATERIAL, AND MARINE CORP SUPPORT FACILITIES

INSTALLATION: UNDERSEA RANGES DEPARTMENT

NEWPORT, RI.

C. O. CAPT. A. S. MCLAREN

SCI.DIR.C.S. SOL102Y

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	18.422	18.866
TOTAL PROCUREMENT	0.342	0.136
TOTAL O&M	5.545	5.207
TOTAL OTHER	0.782	0.531
TOTAL ANNUAL LAB	25.091	24.740
TOTAL INHOUSE	18.059	18.601
TOTAL INHOUSE RDT&E	17.188	18.791
ANNUAL OPERATING COST	0.000	0.000

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	44	0	11	33
CIVILIAN	36	1	26	10
TOTAL	80	1	37	43

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
1042	70.603	17.339	306.012	393.954	23.899	1.282

...MISSION

TO PROVIDE DEEP WATER DEV AND OPRTNL T AND F FCLTYS FOR UNDRWTR ACSTIC MEASRMNTS, TSTNG, AND CALBRNG SONRS. PROVIDE ACURAT UNDRWTR, SRFC, AND IN-AIR TRCKNG DATA ON SHPS, SUBS, AIRCRAFT AND WPN SYSTEMS.

...CURRENT IMPORTANT PROGRAMS

MR48 WEAPON SYSTEMS TRAINING CERTIFICATION PROGRAM

SHIP SILENCING PROGRAM

FLEET TRAINING/SUPROC, SUBEX, SHAREM

AIRBORNE MINEX : TORPEX/RANGEX

R AND D TESTS/CAPTOR/MP SONAR/TOWED ARRAYS/LAMPS/BQQ 5/DICASS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

HIGHLY ADVANCED AND INSTRUMENTED ASW WEAPONS, SONAR AND FORACS TEST MEASUREMENT RANGES IN SUPPORT OF NAVY ASW AND UNDERSEA R AND D PROGRAMS, AND ASW FLEET ASSESMENT AND OPERATIONAL READINESS.

INSTALLATION: UNDERWATER SYSTEMS CENTER

NEWPORT, RI.

C.O. CAPT.A.S. MCLAREN

TECH.DIR.UR.C. NICHOLAS PRYOR

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	97.118	114.260
TOTAL PROCUREMENT	88.070	68.918
TOTAL O&M	57.438	62.572
TOTAL OTHER	15.704	8.216
TOTAL ANNUAL LAB	258.330	253.966
TOTAL INHOUSE	125.988	121.569
TOTAL INHOUSE RDT&E	48.898	61.179
ANNUAL OPERATING COST	31.919	35.864

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	100	1	34	66
CIVILIAN	2306	100	1455	1351
TOTAL	2906	101	1489	1417

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
359	999.660	105.446	560.578	1665.684	46.111	45.073

...MISSION

TO BE THE PRINCIPAL NAVY RDT AND E CENTER FOR SUBMARINE WARFARE AND SUBMARINE WEAPON SYSTEMS.

...CURRENT IMPORTANT PROGRAMS

ADVANCED TECHNOLOGY IN U/W ACOUTCS, OCEAN ENGRNG, INFO PROCSNG, WEAPONRY DESGN, DEV AND EVAL U/W COMBAT SUB SYSTMS INCNG SURFC SHIP SONAR MOD-RNZTN AND RDT AND E FOR OVERALL U/W COMBAT (TRIDENT, 688, ETC) AND DESGN, DEV AND EVAL OF U/W TARGET SYSTEMS AND MOBILE/FIXD U/W TEST RANGES INTRODUCE TO FLEET AND IN-SERVICE ENGINEERING OF MK 48

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PRIMARY IN-HSE R AND D CAPABILITY FOR NAVY AND MARINE CRP SYSTEMS, SUB-SYSTEMS AND TECHNLGYS FOR SONAR SYSTMS (HULL-TOWD/SUB COMCTNS SYSTMS INTEGRTH/SUB ANTNA SYSTMS). UWTR WEAPON SYSTMS/UWTR TARGT SYSTMS/UWTR ACOUTIC PROGTN (LANT AND MED) UWTR RNCE TECHNLGY/REDINESS OF TN-SERVICE SHIPBOARD UWTR SYSTMS/ASW SUP, CINCLNT. TORPEDO TEST RNGES (FIXED/PORT-BLE) SHLOW AND DP WTR.ASW WEAPON FIRE CNTRL R&D FACILITY.ASW WEAPON LAUNCHNG DEVE R AND D FACLT.Y. QLT Y ENGRNG, EVALTN AND RELIABLT Y LAB.BFR MUDA RSCH FACLT.Y.TORPEDO PROPULSN TEST FACLT.Y. ELECTROMAGTIC FACILITY.SY-SYMS CRTIFCTN AND INTGTN FACILT.Y.ACOUTIC MSRMNT AND XDUCER R AND E FAC-LTY, TORPEDO TEST RANGE. INSTRMNTN SHETER.ACOUTIC RNCE.AUTEC.AZORES FIXED ACOUTIC RANGE.

INSTALLATION: WEAPONS CENTER

CHINA LAKE, CA.

C.O. RADM. W. L. HARRIS

TECH.DIR.R.M. HILLYER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	145.745	162.338
TOTAL PROCUREMENT	54.690	33.593
TOTAL O&M	16.008	14.999
TOTAL OTHER	33.390	35.686
TOTAL ANNUAL LAB	249.833	246.616
TOTAL INHOUSE	132.774	161.438
TOTAL INHOUSE RDT&E	86.486	103.993
ANNUAL OPERATING COST	34.490	39.436

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	513	0	39	474
CIVILIAN	3969	127	1387	2582
TOTAL	4482	127	1426	3056

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
1094228	1385.564	429.128	4545.132	6359.824	226.424	94.860

...MISSION

THE PRINCIPAL NAVY RDT&E CENTER FOR AIR WARFARE SYSTEMS, EXCEPT ANTI-SUBMARINE WARFARE SYSTEMS, AND MISSILE WEAPON SYSTEMS.

...CURRENT IMPORTANT PROGRAMS

ELECTRONIC WARFARE - ANTI-RADIATION MISSILES AGM-45 SHRIKE, AGM-88 HARM
ANTI-AIR MISSILES AIM-9H/L/M SIDEWINDER, AIM/RIM-7F/M SPARROW, MSL COMPT
ANTI-SURFACE WEAPONS A/RGM-84 HARPOON, FAE, ADVANCED TACTICAL MISSILES
TAC A/C SYSTEMS INTEGRATION A-7E/D, A-6E, AV-8B, F/A-18, A/C SURV/VULN
T AND E OF AIR/SURFACE-LAUNCHED WPNS, PW EQPTS, TACTICS, A/C WPN SYSTEMS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

CONDUCT IN-HOUSE RESEARCH AND ESTABLISH AND MAINTAIN PRIMARY IN-HOUSE
DEVELOPMENT, TEST, EVALUATION, AND IN-SERVICE ENGINEERING SUPPORT FOR
SPECIFIC NAVY AND MARINE CORPS PRODUCTS SUCH AS ANTI-AIR MISSILES, ANTI-
SURFACE WEAPONS, DEFENSE PENETRATION SYSTEMS, INTEGRATED TACTICAL
AIRCRAFT SYSTEMS. FACILITIES INCLUDE MICHELSON LAB, ELECTRONIC WARFARE
RANGES, SOLID STATE DEVICES LAB, ENCOUNTER SIMULATION LAB, PROPULSION
RESEARCH LAB, MICROELECTRONICS FACILITY, EXPLOSIVES R&D FACILITY, GROUND
AND AIRCRAFT RANGES, EXTERIOR AND TERMINAL BALLISTICS RANGES, ARMITAGE
AIR FIELD, AIRCRAFT SURVIVABILITY FACILITY, SUPERSONIC TEST TRACKS,
MICROWAVE ANECHOIC FACILITIES, AND LASER LAB.

INSTALLATION: WEAPONS EVALUATION FACILITY

ALBUQUERQUE, N.M.

C. O. CAPT. J. J. LAHR

TECH. DIR. MR. E. G. GREWIS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	2.406	2.606
TOTAL PROCUREMENT	0.916	1.000
TOTAL O&M	1.307	1.400
TOTAL OTHER	2.892	3.222
TOTAL ANNUAL LAB	7.521	8.228
TOTAL INHOUSE	7.282	8.228
TOTAL INHOUSE RDT&E	2.406	2.606
ANNUAL OPERATING COST	1.280	1.327

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PMDS	TOTAL PROF	NON- PROF
MILITARY	143	1	25	118
CIVILIAN	111	2	56	55
TOTAL	254	3	81	173

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
7	0.400	53.592	94.926	148.918	9.600	0.926

...MISSION

MISSION—PERFORM TESTS, EVALUATIONS, AND TECHNICAL SUPPORT FOR USN NUCLEAR WEAPON SYSTEMS. PLAN AND COORDINATE THE NAVY NUCLEAR WEAPONS SAFETY PROGRAM. PROVIDE TECHNICAL ASSISTANCE AND ADVICE TO PRESIDENT BOARD OF INSPECTION AND SURVEY. ACT AS SUB-AREA COORDINATOR FOR COMEIGHT.

...CURRENT IMPORTANT PROGRAMS

SUPPORT THE DOE-DOD DEVELOPMENTAL PROGRAM FOR TOMAHAWK.
SUPPORT THE DOE-DOD DEVELOPMENTAL PROGRAM FOR STANDARD MISSILE-2.
ASSIST IN PROVIDING F/A-18 AIRCRAFT WITH A NUCLEAR WEAPONS CAPABILITY.
PROVIDE SUPPORT FOR THE ASW CONCEPTION STUDY.
PARTICIPATE IN THE JOINT USN/USAF AIRBORNE LASER LABORATORY TESTS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

CAPABILITIES—ON USN NUCLEAR WEAPON SYSTEMS: CONDUCT SAFETY STUDIES; SAFETY ANALYSES; SURVIVABILITY AND EFFECTS STUDIES; ANALYZE ACCIDENTS/INCIDENTS, UNSATISFACTORY REPORTS, AND CAPABILITY INSPECTION REPORTS; DEVELOP EMERGENCY DESTRUCT/DENIAL/DISABLE PROCEDURES; ASSIST ON INSPECTION AND SURVEY OF NUCLEAR CAPABLE SHIPS AND AIRCRAFT; DEVELOP AIRCRAFT LOADING MANUALS AND CHECKLISTS; PARTICIPATE IN DOD-DOE DEVELOPMENT EFFORT; EVALUATE AIRCRAFT SUSPENSION, RELEASE, AND ARMING SYSTEMS, BOMB DUMMY UNITS, LOADING HANDLING AND TRAINING SHAPES; DEVELOP MILITARY CHARACTERISTICS, INTERFACE DRAWINGS, SAFETY AND ENVIRONMENTAL CRITERIA; REPRESENT USN AND/OR CONDUCT VARIOUS MEETINGS OR SPECIAL DEVELOPMENT OR APPLICATION STUDIES; ACT AS DOE, DNA, AND OTHER SERVICE CONTACT. DEVELOP AND/OR REVIEW TECHNICAL PUBLICATIONS. SUPPORT NJO JOINT NUCLEAR PUBLICATION SYSTEM.

INSTALLATION: AERO PROPULSION LABORATORY

WPAFB, OH.

CDR. COL. GEORGE E. STRAND

CH. SCI. DR. HANS VON OHAIN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	76.102	85.969
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	1.120	1.181
TOTAL ANNUAL LAB	77.222	87.150
TOTAL INHOUSE	14.053	14.870
TOTAL INHOUSE RDT&E	12.933	13.689
ANNUAL OPERATING COST	2.964	3.875

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	51	8	43	8
CIVILIAN	382	24	208	174
TOTAL	433	32	251	182

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
40	229.490	41.784	105.665	376.939	20.850	18.108

...MISSION

PLAN, FORMULATE AND EXECUTE RESEARCH AND EXPLORATORY, ADVANCED AND PRO-TOTYPE DEVELOPMENT PROGRAMS IN AIR-BREATHING PROPULSION, AEROSPACE POWER GENERATION AND DISTRIBUTION, AIRCRAFT FUELS, FUEL AND LUBRICATION SYS-TEMS, AND FIRE PROTECTION. PROVIDE OPERATIONAL AND SYSTEMS SUPPORT.

...CURRENT IMPORTANT PROGRAMS

ADVANCED TURBINE ENGINE TECHNOLOGY DEMONSTRATORS
OPTIM 2F AVAILABILITY AND COST OF AVIATION TURBINE FUELS
VARIABLE CYCLE ENGINES FOR MULTI-MISSION AIRCRAFT
RAMJETS FOR TACTICAL AND STRATEGIC MISSILES
AIRBORNE HIGH POWER GENERATION AND CONDITIONING

...FUNCTIONS/EQUIPMENT/CAPABILITIES

TURBINE ENGINE CONTROL TEST FAC, BATTERY DEVELOPMENT AND TEST FAC, MHD GENERATOR, LUBRICANT RIGS, SEAL TEST RIGS, BEARING RIGS, FUEL HANDLING FAC, FIRE RESEARCH LAB, COKER LAB, FUEL ANALYSIS LAB, COMBUSTION FAC, ROTOR TEST FAC, 6 SEA LEVEL TEST STANDS TO 60,000 LB THRUST, 2 TURBINE ENGINE ALTITUDE CELLS TO 5,000 LB THRUST-MACH 1.5-50,000 FT, 2 PROPELLER WHIRL RIGS TO 10,000 HP, DIRECT CONNECT RAMJET TEST FAC, RAMJET COMPO-LENTS LAB, ELECTRO AERODYNAMIC LASER, HIGH TEMPERATURE TURBINE COMPONENT TEST FAC, SAND EROSION RIG, AIRCRAFT ELECTRICAL POWER FAC WITH THREE 350 HP DRIVE SOURCES AND AIRCRAFT SIMULATORS, VACUUM CHAMBERS, SUPERCON-DUCTIVITY LAB, HIGH POWER LAB TO 5 MW, THERMAL ENERGY STORAGE LAB, HYDRAULICS LAB, PLASMA PHYSICS LAB, HOLOGRAPHY LAB, COMPRESSOR TEST FAC

INSTALLATION: ARMAMENT DEVELOPMENT AND TEST CENTER

EGLIN AFB, FL.

CDR.MG. ROBERT M. BOND

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	259.916	356.223
TOTAL PROCUREMENT	447.749	383.758
TOTAL O&M	10.898	7.004
TOTAL OTHER	73.823	76.571
TOTAL ANNUAL LAB	792.386	823.556
TOTAL INHOUSE	168.381	183.846
TOTAL INHOUSE RDT&E	93.642	112.112
ANNUAL OPERATING COST	47.806	47.806

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	4367	21	440	3927
CIVILIAN	1225	35	438	787
TOTAL	5592	56	878	4714

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)				REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
464248	347.000	859.991	10713.693	11920.684	286.308	221.438

...MISSION

RESPONSIBLE FOR AIR-LAUNCH TACTICAL AND AIR DEF MSLS, NONNUC MUN, GUIDED WEAP, ELEC-OPTICAL WEP DELSYS, A/C GUN, AMMO, RELATED EQUIP. RESPON FOR BASIC TECHNOLOGY, DEVEL, TEST, INITIAL ACQ AND DEPLOY. TEST MISSION INCL LEAD CENTER IN MUN, EMW, INTRUSION/INTERDICTION, AND CLIMATIC SIMULATION

...CURRENT IMPORTANT PROGRAMS

WIDE AREA ANTI-ARMOR MUNITION
GBU-15
ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE
LOW ALTITUDE AIRFIELD ATTACK SYSTEM
COMBINED EFFECTS MUNITION

...FUNCTIONS/EQUIPMENT/CAPABILITIES

SCIENTIFIC/ENGINEERING PERSONNEL AND LABORATORY FACILITIES CAPABLE OF EXPLOR, ADV, ENG DEV OF NONNUCLEAR MUNITIONS EQUIP. ARMAMENT SYSTEMS TEST ENVIRONMENT COVERING 725 SQ MI WITH LARGE ADJACENT WATER AREA HAS 28 TEST AREAS WITH INSTRUMENTED FACILITIES INCLUDING PRECISION TRACKING RADAR AND PHOTO-OPTICS IS USED FOR MUNITIONS TESTING AND ELECTROMAGNET IC TEST ENVIRONMENT AN INSTRUMENTED COMPLEX OF THREAT SYSTEMS FOR EVAL WPN SYST EFFECTIVENESS PROVIDES A REALISTIC ENVIRONMENT FOR TESTING A WPN SYST AGAINST AN ACTIVE DEFENSE SYSTEM A CLIMATIC LAB CAPABLE OF TESTING COMPLETE WPN SYSTEMS, A COMPUTER SCIENCE LAB, A PHYSICAL SCIENCE LAB, A PHOTO LAB, AN INSTRUMENTATION/DESIGN/FABRICATION FACILITY, AERO-BALLISTIC RESEARCH FACILITY, HIGH EXPLOSIVE R/D FACILITY, A MISSILE SIMULATION AND TEST LABORATORY.

INSTALLATION: ARNOLD ENGINEERING DEVELOPMENT CENTER

TULLAHOMA, TN.

CDR. COL. OLIVER H. TALLMAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	104.069	117.686
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.030	0.014
TOTAL OTHER	5.203	6.650
TOTAL ANNUAL LAB	109.302	124.350
TOTAL INHOUSE	104.629	118.393
TOTAL INHOUSE RDT&E	102.741	116.546
ANNUAL OPERATING COST	15.644	16.981

PERSONNEL	PERSONNEL DATA (FND OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	85	5	50	35
CIVILIAN	131	4	44	87
TOTAL	216	9	94	122

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)				TOTAL REAL PROP	EQUIP
	LAB	ADMIN	OTHER	TOTAL		
39081	1092.409	182.573	561.114	1836.096	380.266	60.029

...MISSION

PRIMARY MISSION IS TO SUPPORT THE TIMELY ACQUISITION OF SUPERIOR AEROSPACE SYSTEMS BY CONDUCTING RESEARCH AND DEVELOPMENT TESTS IN GROUND ENVIRONMENTAL TEST FACILITIES WHICH SIMULATE THE ACTUAL CONDITIONS THAT THE HARDWARE WILL EXPERIENCE IN PERFORMING ITS MISSION

...CURRENT IMPORTANT PROGRAMS

CONTINUED ALCM ENGINE DEVELOPMENT TESTS AND INLET-ENG COMPATIBILITY TEST
CONTINUED F-16 STORE SEPARATION TEST AND ENGINE COMPONENT IMPROVEMENT
CONDUCTED DEVELOPMENT TESTS OF F-16, M-X, IUS, SPACE DEFENSE SYSTEMS
CONTINUED EXTENSIVE MINUTEMAN, PQA AND AGING AND SURVEILLANCE TESTS
OTHER SIGNIF TESTS. F-18, ARRES, SPACE SHUTTLE, BIRD IMPACT, SENSOR PERF

...FUNCTIONS/EQUIPMENT/CAPABILITIES

AEDC IS COMPRISED OF ABOUT 40 TEST UNITS. INCLUDED ARE WIND TUNNELS WITH TEST SECTIONS TO 16 FT SQ AND SPEEDS FROM SUBSONIC TO MACH 22, TURBINE ENGINE TEST CELLS WHICH PROVIDE SIMULATION TO MACH 3, ROCKET TEST CELLS, THE LARGEST RATED AT .5 MILLION LBS THRUST AT ALTITUDE, SPACE SIMULATION CHAMBERS TO 42 FT DIA AND 82 FT HIGH, HYPERBALLISTIC RANGES, DUST AND SNOW EROSION FACILITY, BIRD IMPACT FACILITY, SEVERAL CAPTIVE TRAJECTORY SYSTEMS. THESE FACILITIES HAVE ESSENTIALLY SUPPORTED THE DEVELOPMENT AND QUALIFICATION OF EVERY MAJOR AERONAUTICAL, MISSILE, AND SPACE SYSTEM DEVELOPMENT SINCE 1954. BY PLANNING FOR AN ADEQUATE GROUND ENVIRONMENTAL TEST PROGRAM IN THESE FACILITIES, DEVELOPMENT PROGRAM MANAGERS CAN ASSURE THAT SYSTEM DEFICIENCIES ARE FOUND EARLY, PREVENTING COST AND SCHEDULE OVERRUNS.

INSTALLATION: AVIONICS LABORATORY,

WPAFB, OH.

CDR. COL. R. F. LOPINA

CH. SCI. DR. J. C. RYLES

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	132.364	145.861
TOTAL PROCUREMENT	0.000	0.000
TOTAL OEM	0.000	0.000
TOTAL OTHER	3.240	3.600
TOTAL ANNUAL LAB	135.604	149.461
TOTAL INHOUSE	26.759	29.595
TOTAL INHOUSE RDT&E	23.519	25.995
ANNUAL OPERATING COST	0.000	0.000

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHOS	TOTAL PROF	NON- PROF
MILITARY	171	10	100	71
CIVILIAN	782	41	468	314
TOTAL	953	51	568	385

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
229	248.800	8.775	411.403	668.978	23.618	68.003

...MISSION

MAINTAINS AN AVIONICS TECHNOLOGY BASE THROUGH RESEARCH AND EXPLORATORY AND ADVANCED DEVELOPMENT. DEVELOPS AND DEMONSTRATES COST-EFFECTIVE AVIONICS CONCEPTS TO REDUCE ACQUISITION AND OPERATING COST AND IMPROVE OPERATIONAL CAPABILITIES. SUPPORTS OPERATIONAL CDS AND PRODUCT DIVISIONS.

...CURRENT IMPORTANT PROGRAMS

ALL WEATHER TACTICAL STRIKE SYS-SELF CONTAINED RADAR TARGET ACQ, STRIKE DIRECTOR FIRE CONTROL, IMPROVED AERIAL GUNNERY APPLICATION, ELECTRO-OPTICAL COUNTERMEASURES, TECHNOLOGY TO DEFEAT OPTICAL THREATS, DIGITAL AVIONICS INFORMATION SYSTEM, INTEGRATED SYS ARCHITECTURE, ELECTRONICALLY AGILE RADAR, MULTIMODE RADAR FOR STRATEGIC APPLICATIONS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

MAINTAINS A WIDE RANGE OF AVIONICS SIMULATION, EVALUATION, DESIGN AND FABRICATION CAPABILITIES ACROSS THE BROAD MISSION RANGE. AVSAIL IS FOR ANALYSIS AND SIMULATION OF MULTIPLEX DIGITAL AVIONICS CONCEPTS. CSEL TOGETHER WITH IMAGE PROCESSING FAC AND SATCOM R/T CAN EVALUATE A-A, A-G AND SATELLITE DATA LINK PERFORMANCE. CAD/IC FAC IS USED TO DESIGN AND FABRICATE SPECIALIZED INTEGRATED/HYBRID CIRCUITS AND PRINTED WIRING BOARDS. DEFS, EDE AND EWAC CAN SIMULATE REAL WORLD SIGNAL/JAMMING ENVIRONMENT FOR EVALUATION OF ELECTRONIC WARFARE SYSTEMS. TARGETING SYS CHARACTERIZATION FAC CAN CORRELATE F-O SYSTEMS PERFORMANCE WITH MEASURED WEATHER CONDITIONS. DYNAMIC ANALYZER EVALUATES RECON SENSORS IN REALISTIC FLIGHT ENVIRONMENT. LABS ARE MAINTAINED FOR EVALUATION OF AIRBORNE AND SPACECRAFT SENSORS AND COMPONENTS FROM OPTICAL TO RADIO FREQUENCIES.

INSTALLATION: ENGINEERING SERV CNTR DET1 (CEEEO)

TYNDALL AFB, FL.

CDR. COL. JOSEPH S. PIZZUTO

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	5.268	6.173
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.406	0.481
TOTAL OTHER	1.191	1.200
TOTAL ANNUAL LAB	6.865	7.854
TOTAL INHOUSE	2.080	1.962
TOTAL INHOUSE RDT&E	0.488	0.301
ANNUAL OPERATING COST	0.150	0.150

PERSONNEL	PERSONNEL DATA (END OF FY 1978)				NON- PROF
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF		
MILITARY	66	7	43		23
CIVILIAN	12	2	4		8
TOTAL	78	9	47		31

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
3	4.981	2.200	9.751	16.932	0.938	1.076

...MISSION

LEAD AGENCY FOR RESEARCH, DEVELOPMENT, TEST, AND EVALUATION IN THE AREA OF CIVIL AND ENVIRONMENTAL ENGINEERING. FOCAL POINT FOR FACILITIES ENERGY.

...CURRENT IMPORTANT PROGRAMS

NEW AIRCRAFT OPERATIONAL SURFACES AND RAPID REPAIR SYSTEMS
SURVIVABILITY/VULNERABILITY OF AEROSPACE FACILITIES
ENVIRONMENTAL QUALITY AND ASSESSMENT RESEARCH AND DEVELOPMENT
ENERGY CONSERVATION AND ALTERNATE SOURCES

...FUNCTIONS/EQUIPMENT/CAPABILITIES

CEEEO HAS ACCESS TO LABORATORIES AND TEST SITES TO PERFORM QUALITATIVE AND QUANTITATIVE MEASUREMENTS ON CORROSION, ENGINEERING MATERIAL, PAVEMENTS, SOIL MECHANICS, AIR QUALITY, WASTE TREATMENT PROCESS, FIRE EXTINGUISHING AGENTS, AND HARDENED AIRCRAFT SHELTERS. EQUIPMENT INCLUDES FLAME AND ABSORPTION SPECTROPHOTOMETERS, WATER/WASTE STANDARD METHODS EQUIPMENT, AND A MICROPROCESSOR DEVELOPMENT SYSTEM. REMOTE TERMINAL ACCESS IS AVAILABLE TO A CDC 6800 SCIENTIFIC COMPUTER WITH OFF-LINE DRUM PLOTTING CAPABILITY. A RUNWAY REPAIR/ALTERNATE LAUNCH SURFACES TEST. SITE HAS A 200 X 600 FOOT TYPICAL RUNWAY SECTION.

INSTALLATION: FLIGHT DYNAMICS LABORATORY

WPAFB, OH.

CDR. COL. G. F. CUDAHY

CH. SCI. K. I. COLLIER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT - EST)
TOTAL RDT&E	83.290	82.076
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.345	0.345
TOTAL OTHER	5.259	3.644
TOTAL ANNUAL LAB	88.894	86.065
TOTAL INHOUSE	31.202	30.840
TOTAL INHOUSE RDT&E	27.764	27.196
ANNUAL OPERATING COST	5.775	6.063

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	200	7	106	94
CIVILIAN	750	26	443	307
TOTAL	950	33	549	401

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
92	463.927	22.003	90.867	676.797	26.184	50.516

...MISSION

PLAN AND EXECUTE USAF RESEARCH EXPLORATORY AND ADVANCED DEV PROGRAMS FOR AEROSPACE FLT VEHICLE STRUCTURES AERODYNAMICS FLT CONTROL VEHICLE DYN AND VEHICLE EQUIP. LEAD AFSC LAB FOR EXPER FLT VEHICLES. AFSC FOCAL PT. FOR NONNUCLEAR SURVIVABILITY PROG. EVALUATE CONTRACTOR I R AND D PROG.

...CURRENT IMPORTANT PROGRAMS

ADVANCED COMPOSITE STRUCTURES
ADVANCED FIGHTER TECHNOLOGY INTEGRATOR
COMBINED ENVIRONMENT RELIABILITY TEST
DIGITAL FLIGHT CONTROL SYSTEM
FLIGHT VEHICLE TECHNOLOGY

...FUNCTIONS/EQUIPMENT/CAPABILITIES

50MW TEST FACILITY IS A 30 MIN CONTINUOUS FLOW ARC HEATED HYPERSONIC W/T HAVING A RE-ENTRY NOSE TIP (RENT) TEST LEG AND HYPERSONIC TEST LEG (HTL) STRUCTURES TEST FACILITY PERMITS STRUCTURAL TESTING OF FULL SCALE VEHICLES AND COMPONENTS WITH PROGRAM CONTROLLED SIMULATION OF FORCE AND THERMAL FLT ENVIRONMENTS. LANDING GEAR TEST FACILITY DYNAMICALLY SIMULATES LANDING GEAR COMPONENT PERFORMANCE CHARACTERISTICS THRU PROGRAMMED PARAMETERS OF LOADS VELOCITIES TEMP ETC. ENGINEERING FLT SIMULATION FAC CONTAINS FLT SIMULATORS AND COMPUTING EQUIP TO DEVELOP CONTROL DISPLAY CONCEPTS AND EVALUATE MANS PERFORMANCE ON SPECIFIC DISPLAY AND CONTROL SYSTEMS. BALLISTIC RANGES TEST VULNERABILITY OF AIRCRAFT SUBSYSTEMS BY SIMULATING THREAT FUEL STRUCTURAL AND AERODYNAMIC ENVIRONMENTS.

INSTALLATION: FLIGHT TEST CENTER

EDWARDS AFB, CA.

CDR.BG.P.J. CONLEY, JR.

TECH.DIR.MR F.N. STOLIKER

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	85.675	94.792
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	1.515	1.451
TOTAL OTHER	59.122	51.830
TOTAL ANNUAL LAB	146.312	148.073
TOTAL INHOUSE	105.604	114.150
TOTAL INHOUSE RDT&E	61.847	67.992
ANNUAL OPERATING COST	36.194	39.293

PERSONNEL	PERSONNEL DATA (FND OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	2992	0	128	2864
CIVILIAN	1626	2	213	1413
TOTAL	4618	2	341	4277

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)					
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
227071	106.575	265.404	6730.973	7102.952	272.968	120.062

...MISSION

PLANS, CONDUCTS/SUPPORTS AND REPORTS ON TESTS OF MANNED/UNMANNED AEROSPACE VEH INCL ALL-WEATHER TESTS. CONDUCTS FLIGHT EVAL OF AEROSPACE RSCH VEH AND DEV TEST OF AERODYNAMIC DECELERATORS. OPR USAF TEST PILOT SCHOOL. SUPPORTS USAF, DOD, GOV, FOREIGN AND CONTRACTOR TEST AND EVAL

...CURRENT IMPORTANT PROGRAMS

ALCM DT AND E
F-16 DT AND E
A-10 DT AND E
F-15 DT AND E
B-1 DT AND E

...FUNCTIONS/EQUIPMENT/CAPABILITIES

TECHNICAL CAPABILITIES, FACILITIES AND EQUIP ARE AVAILABLE TO PROVIDE A COMPLETE RANGE OF SERVICES FOR CONDUCTING DT AND E FLT TESTS OF AERONAUTICAL SYS, TO CONDUCT FLT EVAL AND RECOVER RSCH VEH, AND TO TRAIN TEST PILOTS. FLIGHT TEST MISSION CONTROL COMPLEX, ENGRG FACILITIES, REALTIME INSTRUMENTED RANGES, DATA COLLECTION, REDUCTION AND ANALYSIS FACILITIES, PHOTO/TV, ACFT/ENGINE MAINT, TEST EQUIP, ELECTRONIC SHOPS AND DRY LAKES FOR RECOVERY AND EMERGENCY LANDINGS PROVIDE SUPPORT FOR ALL PROGRAMS. OTHER FACILITIES ARE PRECISION IMPACT GUNNERY/BOMBING, INFRARED/PHOTO RESOLUTION, RADAR FIDELITY, TACTICAL AND OPTICAL RANGES, ENGR SIMULATOR, MUNITIONS STORAGE AND CHECKOUT AND CONTRACTOR-ASSIGNED HANGARS, SHOPS, OFFICE SPACE, ETC.

INSTALLATION: FRANK J SEILER RESEARCH LABORATORY

USAF ACADEMY, CO.

CDR. COL. M. D. BACON

CH. SCI. LTC. B. A. LOVING

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&F	0.775	0.745
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	0.570	0.600
TOTAL ANNUAL LAB	1.345	1.345
TOTAL INHOUSE	1.279	1.288
TOTAL INHOUSE RDT&F	0.709	0.688
ANNUAL OPERATING COST	0.045	0.050

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	23	15	20	3
CIVILIAN	9	1	5	4
TOTAL	32	16	25	7

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
1	19.000	3.100	0.000	22.100	1.680	1.634

...MISSION

CONDUCT RESEARCH IN AEROSPACE MECHANICS, APPLIED MATHEMATICS & CHEMISTRY. ENCOURAGE & SUPPORT ACADEMY FACULTY & CADET RESEARCH BY DIRECT PARTICIPATION. MONITOR FACULTY CONSULTANT PROG, SUMMER RSCH PROG, FOCAL POINT FOR USAF ACADEMY RESEARCH PROPOSED TO DL RESEARCH & TECHNOLOGY LABS (AFSC).

...CURRENT IMPORTANT PROGRAMS

BATTERY RESEARCH & ELECTROCHEMISTRY OF MOLTEN SALTS, ENERGETIC MATERIALS RESEARCH, CHEMICAL MOLECULAR DYNAMICS OF LASERS AND PLUMES. APPLIED OPERATIONS RESEARCH, INERTIAL GUIDANCE TESTING, ADVANCED SENSOR DEVELOPMENT, MICROPROCESSOR RESEARCH. FLUID DYNAMICS, UNSTEADY AERODYNAMICS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

MOLTEN SALT MELT STRUCTURE, CONDUCTIVITY & ELECTRODE REACTIONS. EXPLOSIVE & PROPELLANT SYNTH, DECOMPOSITION MECHANISMS & DETONATION PHENOMENA. GENERATION, MSMT, SPECTROSCOPY & NO CALC. OF EXCITED STATE SPECIES. IR, UV, NMR, EPR, X-RAY & MASS SPECTS, GAS & LIQ CHROMATOGRAPHS, ELECTRON MICROSCOPE, SPECIAL SPECTROMETERS & CONDUCTIVITY EQUIP., ASSOC FACILITIES FOR WET CHEMISTRY. ADVANCED ANALYSIS & EVALUATION TECHNIQUES FOR INERTIAL GUIDANCE SENSORS USING 2-AXIS TEST TABLE (GYRO), AUTOMATIC AZIMUTH ALIGNMENT EQUIPMENT & ELECTRONIC CONTROL EQUIP FOR 50 SERIES INERTIAL DEVICES LOCATED IN A CLASS 1000 CLEAN LAB ON 80 TON AIR SUPPORTED STABLE PLATFORM. PDP 11/45 MINI COMPUTER & SOFTWARE TO AUTOMATE GYRO RESEARCH. AERODYNAMIC RESEARCH IN USAFA SUBSONIC & TRANSONIC WIND TUNNELS, HOLOGRAPHIC & OTHER OPTICAL FLOW VISUALIZATION INSTRUMENTATION.

INSTALLATION: GEOPHYSICS LABORATORY

HANSCOM AFB, MA.

CDR. COL. BERNARD S. MORGAN, JR.

CH. SCI. DR. JOHN N. HOWARD N. N. HOWARD

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	46.400	46.000
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	9.110	10.000
TOTAL ANNUAL LAB	55.510	56.000
TOTAL INHOUSE	25.317	25.224
TOTAL INHOUSE RDT&E	21.334	21.466
ANNUAL OPERATING COST	5.118	5.232

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	120	7	41	79
CIVILIAN	505	73	308	197
TOTAL	625	80	349	276

ACRES	SPACE AND PROPERTY			TOTAL	COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN		REAL PROP	EQUIP
368	391.903	15.006	25.883	432.792	9.717	21.453

...MISSION

CONDUCTS AND SUPPORTS AF RELEVANT RESEARCH AND EXPLORATORY DEVELOPMENT IN ENVIRONMENTAL AND PHYSICAL SCIENCES WITH MAJOR EMPHASIS ON GEOPHYSICS. ALSO CONDUCTS AND SUPPORTS SPECIFICALLY ASSIGNED ADVANCED DEVELOPMENT EFFORTS.

...CURRENT IMPORTANT PROGRAMS

SPACECRAFT CHARGING TECHNOLOGY
SURFACE WEATHER OBSERVING AUTOMATION
STRATOSPHERIC ENVIRONMENTAL IMPACT ASSESSMENTS
OPTICAL, INFRARED AND UV BACKGROUNDS FOR SURVEILLANCE SYSTEMS
GEODETIC AND GEOKINETIC EFFECTS ON MISSILE CEP

...FUNCTIONS/EQUIPMENT/CAPABILITIES

CONDUCTS RESEARCH AND TECHNICAL DEVELOPMENT IN TERRESTRIAL SCIENCES, METEOROLOGY, AERONOMY, AND OPTICAL, SPACE AND SOLAR PHYSICS RELATING TO AIR FORCE NEEDS. EQUIPMENT AND FACILITIES INCLUDE RADIO TELESCOPES FOR SOLAR RESEARCH; ONE C-130 AIRCRAFT FOR METEOROLOGICAL RESEARCH; ROCKET AND BALLOON LAUNCH FACILITIES; TWO KC-135 AIRCRAFT FOR OPTICAL, UPPER ATMOSPHERIC AND NEAR EARTH SPACE STUDIES; AND TWO CDC 6600 COMPUTER SYSTEMS.

INSTALLATION: HUMAN RESOURCES LABORATORY

BROOKS AFB, TX.

CDR. COL. DONALD W. TERRY

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	22.230	20.040
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.915
TOTAL OTHER	3.215	2.440
TOTAL ANNUAL LAB	25.445	23.395
TOTAL INHOUSE	10.097	10.442
TOTAL INHOUSE RDT&E	7.797	8.002
ANNUAL OPERATING COST	1.291	1.482

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	126	12	91	35
CIVILIAN	241	46	158	83
TOTAL	367	58	249	118

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
13	69.595	48.264	61.429	179.288	5.447	31.647

...MISSION

PRINCIPAL AFSC ORGANIZATION CHARGED WITH PLANNING AND EXECUTING EXPLORATORY AND ADVANCED DEVELOPMENT PROGRAMS FOR SELECTION, MOTIVATION, TNG, RETENTION, EDUCATION, UTILIZATION AND CAREER DEVELOPMENT OF AF MILITARY PERSONNEL COMPOSITION OF PERSONNEL FORCE AND TNG EQUIPMENT.

...CURRENT IMPORTANT PROGRAMS

ADVANCED DEVELOPMENT IN THE USE OF SIMULATION FOR UNDERGRADUATE PILOT AND AEROSPACE CREW TNG. IMPROVED PERSONNEL SELECTION, CLASSIFICATION, EVALUATION AND UTILIZATION TECHNIQUES. HUMAN FACTORS IN DESIGN OF TNG SYSTEMS. DESCRIBING, EVALUATING AND STRUCTURING AF OCCUPATIONS. IMPROVED TECHNICAL TNG THROUGH ADVANCED INSTRUCTIONAL SYSTEMS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

OCCUPATIONAL ANALYSIS, PERSONNEL PROCUREMENT, CLASSIFICATION, RETENTION AND SEPARATION, COMPUTER SIMULATION MODELS FOR PERSONNEL SYSTEMS, MAN-POWER RUMTS OF AF WEAPONS SYS, TNG TECHNIQUES, DESIGN OF SIMULATORS AND OTHER TRAINING DEVICES, CONDUCT TNG RESEARCH ASSOCIATED WITH PILOT TNG USING SOPHISTICATED HIGH-FIDELITY A/C SIMULATORS, ADVANCED INSTRUCTIONAL SYS FOR INDIVIDUALLY PACED COMPUTER AIDED TECH INSTRUCTION, ADVANCED SIMULATOR FOR UPT, ADVANCED INSTRUCTIONAL SYSTEM, SIMULATION AND TRAINING ADVANCED RESEARCH SYSTEM, SIMULATION FOR MAINTENANCE TRAINING, TECHNICAL LIBRARY, PERSONNEL TESTING ROOMS, COMPUTER, UNIVAC 1108 ELECTRONIC DATA PROCESSING SYSTEM WITH 2 CPUS, 16 TAPE DRIVES, 16 DISC DRIVES, 21 UNISCOPE INTERACTIVE TERMINALS, GRAPHICS DISPLAY CONSOLE, 2 PRINTERS, CARD READER, CARD PUNCH. ELEC ASSOC TR 48 ANALOG COMPUTER.

INSTALLATION: MATERIALS LABORATORY

WPAFB, OH.

CDR. COL. P. O. BOUCHARD

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	50.739	50.355
TOTAL PROCUREMENT	41.006	52.567
TOTAL O&M	0.000	0.000
TOTAL OTHER	1.120	1.144
TOTAL ANNUAL LAB	92.865	104.066
TOTAL INHOUSE	16.075	15.954
TOTAL INHOUSE RDT&E	14.955	14.810
ANNUAL OPERATING COST	5.599	5.600

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	57	9	49	8
CIVILIAN	362	73	288	74
TOTAL	419	82	337	82

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL REAL PROP	EQUIP	
	LAB	ADMIN	OTHER			
15	222.809	25.169	111.156	359.134	19.675	15.473

...MISSION

PLAN/EXECUTE EXPLORATORY AND ADVANCED DEVELOPMENT, AND ASSIGNED BASIC RSCH, PROGS. FOR MATERIALS. PROVIDE TECH./MANAGEMENT ASSISTANCE FOR STUDIES, ANALYSES, DEVELOPMENT PLANNING, ACQUISITION, TEST, EVALUATION MOD. AND OPN. OF AEROSPACE SYSTEMS. MANAGE/DIRECT A.F. DIRECT MFG. PROG.

...CURRENT IMPORTANT PROGRAMS

ADVANCED DEVELOPMENT OF LASER HARDENED MATERIALS
MANUFACTURING TECHNOLOGY COST REDUCTION PROGRAM FOR METALS, NONMETALS AND THERMAL PROTECTION MATERIALS FOR REENTRY VEHICLES
PROPULSION MATERIALS
SYSTEMS SUPPORT

...FUNCTIONS/EQUIPMENT/CAPABILITIES

MATERIALS RESEARCH AND DEVELOPMENT FACILITIES AND CAPABILITIES FOR AEROSPACE STRUCTURES, THERMAL PROTECTION SYSTEMS FOR BALLISTIC REENTRY VEHICLES AND ENGINES, FLUIDS, LUBRICANTS, FLUID CONTAINMENT, PROPULSION, COATINGS, FIBERS, EM WINDOWS, SENSORS, DISPLAYS, LASER WINDOWS, AND OPT DEVICES, ELECT COMPONENTS, NON-DESTRUCTIVE TESTING, POLYMERS, ADHESIVES, NONMETALLIC MATRIX COMPONENTS, ELASTOMERS, METALS, ALLOYS, METAL COMPOSITES, METAL PROCESSING, INTERMETALLICS, CERAMICS, STATIC AND DYNAMIC BEHAVIOR, JOINING, GRAPHITE, ELECTRONIC, PHYSICAL, CHEMICAL ANALYSIS. OTHER MAJOR MATERIALS FUNCTIONS -MANUFACTURING TECHNOLOGY, SYSTEM APPLICATION, SYSTEM SUPPORT, THERMAL PROTECTION MATERIALS.

INSTALLATION: ROCKET PROPULSION LABORATORY

EDWARDS AFB, CA.

CDR. COL. WILLIAM F. MORRIS

CH. SCI. DR. RICHARD R. WEISS

PROGRAM DATA BY FISCAL YEAR (MILLION \$)

PROGRAM	1978 (ACTUAL)	1979 (ACT + ES)
TOTAL RDT&E	36.222	36.990
TOTAL PROCUREMENT	0.474	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	2.088	2.200
TOTAL ANNUAL LAB	38.784	39.190
TOTAL INHOUSE	12.556	13.057
TOTAL INHOUSE RDT&E	10.317	10.857
ANNUAL OPERATING COST	0.376	0.400

PERSONNEL DATA (END OF FY 1978)

PERSONNEL	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	176	2	71	105
CIVILIAN	260	13	91	169
TOTAL	436	15	162	274

SPACE AND PROPERTY

ACRES	SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
68345	419.046	86.848	4.780	510.674	125.000	23.482

...MISSION

CONDUCT THE AIR FORCE'S ROCKET PROPULSION EXPLORATORY AND ADV DEVEL PROG RAMS TO PROVIDE ADV TECH FOR FUTURE ICBMS, STRATEGIC AND TACTICAL AIR LA UNCHED MISSILES, SPACE VEHICLES, AND SATELLITES. PROVIDES ROCKET PROPULS ION TECHN~LOGICAL SUPPORT TO DOD AND NON-DOD AGENCIES.

...CURRENT IMPORTANT PROGRAMS

PROVIDE REDUCED RISK PROPULSION O. TIONS FOR MX FULL SCALE DEVEL. PROVIDE SOLID ROCKET SIGNATURE, PERFORMANCE, AND ENERGY MGT OPTIONS FOR AIR LAU NCHED MISSILES. DEMO 30 TO 50 PERCENT REDUCTION IN COST OF HIGH PRODUCTIO N RATE SOLID ROCKETS. DEMO AN IMPROVED PERFORMANCE KICK MOTOR TECHNOLOGY FOR SPACE APPL. DEMO LONG LIFE MONOPROPELLANT SATELLITE THRUSTERS.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

A PHYSICAL SCIENCE LAB FOR SYNTHESIS, ANALYSIS AND FORMULATION OF NEW PR OPELLANTS. FACILITIES FOR MIXING, CASTING, CURING AND TESTING SOLID ROCK ET MOTORS. A SOLID MOTOR TEST AND EVAL COMPLEX FOR INVESTIGATION OF COMB USTION, AGING, STRUCTURAL INTEGRITY, BALLISTIC PERFORMANCE AND HIGH TEMP COMPONENTS LAB FOR TESTING SMALL ATTITUDE CONTROL AND SATELLITE PROPUL SION SYSTEMS AND COMPONENTS UNDER SIMULATED SPACE ENVIRONMENTS. ALTITUDE TESTING OF LIQUID AND SOLID ROCKETS UP TO 50,000 POUNDS THRUST. AMBIENT TESTING OF LIQUID OR SOLID ROCKETS UP TO 500,000 POUNDS THRUST. IN-HOUSE ANALYTICAL CAPABILITY FOR DESIGN, ANALYSIS, AND TEST DATA REDUCTION. SHO PS FOR FABRICATING TEST HARDWARE AND TEST SYSTEMS. A FULL SCALE RFENTRY NOSETIP TEST FACILITY.

INSTALLATION: ROME AIR DEVELOPMENT CENTER

GRIFFISS AFB, N.Y.

CDR. COL. DONALD J. STUKEL

CH. SCI. DR. JOHN S. BURGESS

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	125.977	134.360
TOTAL PROCUREMENT	37.761	41.150
TOTAL O&M	11.605	12.649
TOTAL OTHER	45.437	53.421
TOTAL ANNUAL LAB	220.780	241.589
TOTAL INHOUSE	29.573	29.726
TOTAL INHOUSE RDT&E	22.059	22.059
ANNUAL OPERATING COST	9.264	9.727

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	232	5	98	134
CIVILIAN	1101	58	607	494
TOTAL	1333	63	705	628

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)	LAB	ADMIN	OTHER	TOTAL	REAL PROP
1560	847.196	77.272	127.532	1052.000	30.470	52.046

...MISSION

CONDUCTS RESEARCH, EXPLORATORY AND ADVANCED DEVELOPMENT, TEST AND SELECTED ACQUISITION PROGRAMS IN SUPPORT OF COMMAND, CONTROL AND INTELLIGENCE C-CUBED AREAS OF INFORMATION SCIENCES AND INTELLIGENCE.

...CURRENT IMPORTANT PROGRAMS

HAVE NOTE
TARGET ACQUISITION AND WEAPON DELIVERY SYSTEM
TACTICAL TARGET IDENTIFICATION TECHNOLOGY
SEEK TALK
WIDEBAND RECORDING TECHNOLOGY

...FUNCTIONS/EQUIPMENT/CAPABILITIES

PRINCIPLE TECHNICAL AREAS ARE COMMUNICATIONS, ELECTROMAGNETIC GUIDANCE AND CONTROL, SURVEILLANCE OF GROUND AND AEROSPACE OBJECTS, INTELLIGENCE DATA COLLECTION AND HANDLING, INFORMATION SYSTEM TECHNOLOGY, IONOSPHERIC PROPAGATION, SOLID STATE SCIENCES, MICROWAVE PHYSICS AND ELECTRONIC RELIABILITY, MAINTAINABILITY AND COMPATIBILITY. MAJOR IN-HOUSE FACILITIES ARE RECONNAISSANCE EXPLOITATION FACILITY, HIGH POWER FACILITY, DIGITAL COMMUNICATIONS EXPERIMENTAL FACILITY, R AND D COMPUTER FACILITY CONSISTING OF TWO HONEYWELL 6180 COMPUTERS, RELIABILITY ANALYSIS CENTER, RADIATION EFFECTS FACILITY, CARTOGRAPHIC TEST FACILITY, ECCM AND SIGNAL PROCESSING LABORATORY, SOLID STATE DEVICE FAILURE ANALYSIS FACILITY, EXPERIMENTAL DEVICE FABRICATION FACILITY, AND AN ELECTROMAGNETIC VULNERABILITY FACILITY FOR WEAPONS TESTING.

INSTALLATION: SCHOOL OF AEROSPACE MEDICINE

BROOKS AFB, TX.

CDR. COL. L. J. ENDERS

DEP. DIR. BILLY E. WELSH

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	13.160	14.097
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	5.815	6.739
TOTAL ANNUAL LAB	18.975	20.836
TOTAL INHOUSE	16.100	16.751
TOTAL INHOUSE RDT&E	10.285	10.012
ANNUAL OPERATING COST	2.000	2.000

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	388	60	108	280
CIVILIAN	280	35	101	179
TOTAL	668	95	209	459

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
74	360.655	77.980	48.696	487.331	16.936	20.539

...MISSION

CONDUCT EXPLORATORY RESEARCH AND DEVELOPMENT PROGRAMS IN AEROSPACE BIOTECHNOLOGY; INCLUDES LIFE SUPPORT, AEROSP MEDICINE, BIOMEDICAL PROGRAMS AND RADIOBIOLOGY. PROVIDE MEDICAL EVALUATION AND CONSULTATION FOR AIRCREWS TO ASSURE RETENTION OF FLYING STATUS.

...CURRENT IMPORTANT PROGRAMS

CREW READINESS AND CREW PROTECTION TECHNOLOGY FOR ADVANCED SYSTEMS
MEDICAL AND BIOMEDICAL ASPECTS OF AEROSPACE OPERATIONS
HEALTH EVALUATION AND RISK TABULATION (HEART)
RADIOBIOLOGY IN AEROSPACE OPERATIONS
MODELING BIOLOGICAL SYSTEMS/MAN-ATMOSPHERE ENVIRONMENT INTERACTION

...FUNCTIONS/EQUIPMENT/CAPABILITIES

RESEARCH IN AEROSP MEDICAL PROBLEMS, LIFE SUPPORT, ENVIRONMENTAL STRESS, RADIOBIOLOGY, LASER, BIOMETRICS, BIOMEDICAL ENGINEERING, RDT&E ON MEDICAL EQUIPMENT AND SYSTEMS. WHOLE BODY COUNTER, HUMAN CENTRIFUGE, TESTING CELLS, RESEARCH CHAMBERS, NEUTRON GENERATOR, KILO-CURIE COBALT 60 RADIATION SOURCE, ELECTRON MICROSCOPE SYSTEM, REMOTE INTERACTIVE GRAPHIC TERMINAL SYSTEM, THERMAL CHAMBER, CARDIAC CATH. LAB, AEROSP MED SCIENCE LAB, LASER HAZARD FACILITIES, AEROMEDICAL LIBRARY AEROSP MEDICAL EVAL AND CONSULTATIVE SERVICES, OPTICAL RESEARCH AUDIOLOGY, VESTIBULAR STUDIES, PSYCHOBIOLOGY, RADIOISOTOPE, AEROMEDICAL STANDARDS, MODELING, BIOMEDICAL RESEARCH, MEDICAL REPOSITORIES, RADIATION SCIENCES RESEARCH, BIODYNAMICS RESEARCH, DEVELOPMENTAL ENGINEERING.

INSTALLATION: SPACE & MISSILE TEST CENTER (DET 1)

PATRICK AFB, FL.

CDR. COL. OSCAR W. PAYNE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	0.000	0.000
TOTAL PROCUREMENT	4.944	5.073
TOTAL O&M	149.949	161.446
TOTAL OTHER	1.727	2.201
TOTAL ANNUAL LAB	156.620	168.720
TOTAL INHOUSE	43.317	41.552
TOTAL INHOUSE RDT&E	0.000	0.000
ANNUAL OPERATING COST	30.884	27.112

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	98	0	61	37
CIVILIAN	330	2	93	235
TOTAL	428	2	156	272

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
16025	65.937	261.593	2573.930	2901.460	280.742	328.672

...MISSION

SUPPORT OF LAUNCH PROGRAMS AND AIR/GROUND-LAUNCHED MISSILE SYSTEMS FROM CCAFS AND KSC, OPERATION OF THE ARIS IN SUPPORT OF JCS REQUIREMENTS, SUPPORT OF AEROSPACE DEFENSE COMMAND ON-ORBIT TRACKING REQUIREMENTS AND SUPPORT OF SPECIAL PROJECTS, DOCUMENTED R&D TESTS AND TENANT ACTIVITIES.

...CURRENT IMPORTANT PROGRAMS

FBM PROGRAMS - POLARIS, POSEIDON, TRIDENT AND CHEVALINE
MIL SPACE SUPPORT PROGRAMS - TITAN IIIC AND TITAN 340/IUS
MIL MISSILE SUPPORT PROGRAMS - SRAM/OT&E AND PERSHING
NASA - THOR/DELTA, ATLAS/CENTAUR AND SPACE SHUTTLE PROGRAMS
ODD SPACE TRANSPORTATION PROGRAM

...FUNCTIONS/EQUIPMENT/CAPABILITIES

ETR CAPABILITIES INCLUDE: ASSEMBLY, PRE-LAUNCH TESTING AND LAUNCH PERFORMANCE EVALUATION OF BALLISTIC MISSILES, LAUNCH VEHICLES, SPACE-CRAFT AND SATELLITES TO INCLUDE TRACKING, LONG DISTANCE COMMUNICATIONS, DATA TRANSMISSION, COLLECTION AND REDUCTION. EQUIPMENT AND FACILITIES INCLUDE MAINLAND AND DOWN-RANGE INSTRUMENTATION AND COMMUNICATIONS, INSTRUMENTED SHIPS, SCIENTIFIC DATA PROCESSING EQUIPMENT AND FACILITIES, PHOTO/ELECTRO-OPTICAL SYSTEMS AND SERVICES, MISSILE IMPACT LOCATION SYSTEMS, METEOROLOGICAL WEATHER STATIONS AND EQUIPMENT, AND RANGE TIMING SYSTEMS. DET 1, SAMTEC OPERATES AND MAINTAINS CCAFS, MAINLAND SITES AND DOWN-RANGE STATIONS. SUPPORT FUNCTIONS INCLUDE LAUNCH SUPPORT SERVICES AND OVERALL GENERAL MANAGEMENT OF THE ETR, INCLUDING PLANT ENGINEERING, CONTRACTOR OPERATIONS, LABORATORIES, SHOPS AND OTHER SPECIAL SERVICES.

INSTALLATION: SPACE AND MISSILE TEST CENTER

VANDENBERG AFB, CA.

CDR. BG. JAMES H. MARSHALL

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL ROT&E	52.267	50.400
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	20.423	26.563
TOTAL ANNUAL LAB	72.690	76.963
TOTAL INHOUSE	17.712	20.663
TOTAL INHOUSE ROT&E	10.255	12.900
ANNUAL OPERATING COST	0.881	0.962

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	266	4	209	57
CIVILIAN	351	0	150	201
TOTAL	617	4	359	258

ACRES	SPACE AND PROPERTY (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
55586	91.407	334.384	431.954	857.745	94.520	70.670

...MISSION

MANAGE FIELD TEST AND LAUNCH OPERATIONS FOR SAMSO/OTHERS. DEVELOP, MANAGE AND OPERATE THE EASTERN AND WESTERN TEST RANGES (ETR/WTR) AS DESIGNATED NATIONAL RANGES.

...CURRENT IMPORTANT PROGRAMS

MINUTEMAN III R AND D AND OPERATIONAL TESTING PROGRAMS.
CLASS AND UNCLAS SPACE PGMS USING ATLAS, TITAN, THOR AND SCOUT.
ADVANCED BALLISTIC REENTRY SYSTEMS PROGRAMS.
GUIDED MISSILE PROGRAMS INCLUDING CRUISE MISSILES AND ROMARC.
AIRCRAFT PROGRAMS INCLUDING B-1, F-16, F-18.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

SAMTEC CAPABILITIES INCLUDE TEST LAUNCH AND RANGE SUPPORT. TEST LAUNCH INCLUDES: ASSEMBLY AND PRELAUNCH TESTING OF LAUNCH VEHICLE SYSTEMS USING ATLAS, TITAN AND MM BOOSTERS; AGENA AND TITAN III UPPER STAGES; PAYLOAD AND VEHICLE INTEGRATION AND CHECKOUT; AND LAUNCH CONTROL. WTR (PACIFIC) RANGE SUPPORT INCLUDES NEAR AND FAR TERM RANGE INSTRUMENTATION PLANNING, AND DATA GATHERING ON BALLISTIC/SPACE/GUIDED MISSILE/PROBE LAUNCHES, AIRCRAFT SYSTEMS AND OTHER TESTS AT UPRANGE AND DOWNRANGE LOCATIONS. VARIOUS RADAR, TELEMETRY OPTICAL, DATA PROCESSING, COMMUNICATIONS AND COMMAND-CONTROL SYSTEMS ARE AVAILABLE. LAUNCH AZIMUTHS VARY FROM 140 TO 313 DEGREES. AERONAUTICAL TESTS ARE CONDUCTED IN A WELL INSTRUMENTED OFF-SHORE TEST AREA. LAUNCH FACILITIES AND RANGE INSTRUMENTATION CAN BE RECONFIGURED TO MEET PROGRAM REQUIREMENTS.

INSTALLATION: WEAPONS LABORATORY

KIRTLAND AFB, N.M.

CDR. COL. L. L. FPPLEY

DIR. DR. W. L. LEHMANN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	136.953	163.317
TOTAL PROCUREMENT	0.000	0.000
TOTAL OEM	0.255	0.245
TOTAL OTHER	11.982	12.641
TOTAL ANNUAL LAB	149.190	176.203
TOTAL INHOUSE	38.601	43.238
TOTAL INHOUSE RDT&E	26.619	30.597
ANNUAL OPERATING COST	1.352	1.805

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	645	51	380	265
CIVILIAN	480	36	240	240
TOTAL	1125	87	620	505

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
702	556.000	142.000	134.000	832.000	98.233	69.854

...MISSION

RESPONSIBLE FOR EXPLORATORY, ADVANCED, AND ENGINEERING DEVELOPMENT IN NUCLEAR WEAPONS EFFECTS, COMPONENTS, RADIATION HAZARDS, NUCLEAR SURVIVABILITY/VULNERABILITY, HIGH ENERGY LASER SYSTEMS, ADVANCED WEAPON TECHNOLOGY, AND LASER WEAPON TECHNOLOGY.

...CURRENT IMPORTANT PROGRAMS

ADVANCED RADIATION TECHNOLOGY
ADVANCED WEAPON TECHNOLOGY
NUCLEAR SURVIVABILITY/VULNERABILITY ANALYSIS AND TESTING
NUCLEAR SAFETY ANALYSIS AND DESIGN CRITERIA
NUCLEAR WEAPONS EFFECTS ANALYSIS AND TESTING

...FUNCTIONS/EQUIPMENT/CAPABILITIES

NUCLEAR WEAPONS EFFECTS SIMULATION, SAFETY, COMPONENT ASSESSMENT AND ANALYSIS OF WEAPONS SYSTEMS NUCLEAR HARDNESS ARE CONDUCTED IN ENGINEERING TEST LABORATORIES AND PHYSICS LABORATORIES. SIMULATION TESTS ON MISSILES, AIRCRAFT, AND COMPONENTS USE ELECTROMAGNETIC PULSE SIMULATORS, GAS GUNS, AND X-RAY DEVICES. CIVIL ENGINEERING PROGRAMS USE SHOCK TUBES AND HIGH EXPLOSIVES FOR SIMULATION OF NUCLEAR BLAST AND SHOCK. LASER SYSTEMS DEVELOPMENT USES LASER/OPTICS LABORATORIES AND TEST RANGES WITH LARGE, HIGH POWER DEVICES. A TECHNICAL LIBRARY, METALLURGY AND METROLOGY LABORATORIES, 2 CYBER 176 AND 2 CDC-6600 COMPUTERS WITH REMOTE ACCESS TERMINALS AND MULTI-CHANNEL SENSING/RECORDING AND DATA REDUCTION SUPPORT ALL REQUIRING RDT/E PROGRAMS.

INSTALLATION: 4950 TEST WING

WPAFB, OH.

CDR. COL. P. W. ODGERS

TECH. DIR. MR. P. J. CORCORAN

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL ROT&E	39.367	40.243
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	2.000	2.000
TOTAL OTHER	0.017	0.018
TOTAL ANNUAL LAB	41.384	42.261
TOTAL INHOUSE	41.087	41.898
TOTAL INHOUSE ROT&E	39.070	39.880
ANNUAL OPERATING COST	0.014	0.014

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	863	1	183	680
CIVILIAN	1068	0	94	974
TOTAL	1931	1	277	1654

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)			TOTAL	REAL PROP	EQUIP
	LAB	ADMIN	OTHER			
227	0.000	68.320	973.152	1041.472	11.966	277.290

...MISSION

DOD MAJ TEST FAC. PERFORMS T&E ON MIL SYS, SUBSYS, AND COMP. OPER & MAIN ASGN TEST SUP ACFT AND ANCIL EQUIP. MANAGES A CENTRAL FAC FOR MAJ MOD OF AFSC ACFT. OPER SHOP FAC IN SUP OF CMD ACFT CLASS II MODS AND AFWAL R&D PROGRMS. PROVIDES FLT TST ENGRG, TECH DATA ACQ, AND TECH PHOTO SVCS.

...CURRENT IMPORTANT PROGRAMS

ARIA SUPPORT TO NASA
AEROSPACE FLIGHT DYNAMICS LAB SUPPORT
INFRARED WARNING RECEIVER
TITAN IIIC
AIRBORNE LASER LAB CYCLE III

...FUNCTIONS/EQUIPMENT/CAPABILITIES

43 TEST SUPPORT AIRCRAFT (8 ARIA EC-135)
ALL AFSC MAJOR CLASS II AIRCRAFT MODIFICATIONS
MISSILE LAUNCH/REENTRY TRACKING AND DATA RELAY
WORLDWIDE TEST SUPPORT CAPABILITY
1400 SQUARE MILE RESTRICTED TEST AREA IN OHIO
FLIGHT TEST ENGINEERING (AERO-MECHANICAL, AVIONICS, AND ARIA
TEST DATA ACQUISITION/PROCESSING/ANALYSIS
3 OPERATIONAL SQS (FLIGHT CREWS) AND 3 MAINTENANCE SQS
SPECIALIZED SHOP EQUIP METAL/WOOD WORKING, MODELING, & DATA AUTOMATION
TECHNICAL PHOTOGRAPHIC INSTRUMENTATION & PROCESSING
CENTRAL AFSC AT WPAFB PMEL SERVICES
ASD LABORATORY MATERIAL CONTROL ACTIVITY

INSTALLATION: 6570 AEROSPACE MEDICAL RESEARCH LABORATORY WPAFB, OH.

CDR. COL. ROY L. DEHART

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	14.534	14.051
TOTAL PROCUREMENT	0.000	0.000
TOTAL OEM	0.000	0.000
TOTAL OTHER	0.000	0.000
TOTAL ANNUAL LAB	14.534	14.051
TOTAL INHOUSE	6.193	5.715
TOTAL INHOUSE RDT&E	6.193	5.715
ANNUAL OPERATING COST	0.700	0.700

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	136	5	39	97
CIVILIAN	158	24	99	59
TOTAL	294	29	138	156

ACRES	SPACE AND PROPERTY				COST (MILLION \$)	
	SPACE (THOUSANDS OF SQUARE FEET)					
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
30	71.886	43.129	51.100	166.115	19.213	27.400

...MISSION

ACCOMPLISH BEHAVIORAL AND BIOMEDICAL RESEARCH AND DEVELOPMENT TO DEFINE HUMAN TOLERANCE AND DEGRADATION OF HUMAN PERFORMANCE UNDER THE CONDITION OF ENVIRONMENTAL STRESS ASSOCIATED WITH AEROSPACE OPERATIONS AND PROVIDE SUPPORT TO SYSTEM DEVELOPMENT IN THE ABOVE AREAS.

...CURRENT IMPORTANT PROGRAMS

DEFINE TOXIC HAZARDS, ENVIR POLLUTION EFF OF MISSILE OPS-PROPELLANT TEST.
 DEFINE EFFECT OF CREW PERF ON MANNED WEAPON SYSTEM EFFECTIVENESS.
 DEV OPTICAL COUNTERMEASURE MECHANISMS FOR ADV DEV PROGRAM APPLICATIONS.
 EFF OF OPERATIONAL NOISE AND VIBRATION ENVIRONMENTS ON AF PERSONNEL-OPS.
 INV OF COMBINED STRESSES AND THEIR IMPACT ON HUMAN OPERATOR PERF METRICS

...FUNCTIONS/EQUIPMENT/CAPABILITIES

HUMAN DECELERATION SYSTEM TO SIMULATE THE COMPLEX ACCELERATION ENVIRON ASSOCIATED WITH EJECTION AND CRASH LANDING. DYNAMIC ENVIRONMENT SIMULATOR A SIX DEGREE OF FREEDOM MAN-RATED CENTRIFUGE USED TO SIMULATE SUSTAINED ACCELERATIONS SUCH AS THOSE ENCOUNTERED IN AIR COMBAT MANUVERING. THOMAS DOMES-EIGHT ALTITUDE EXPOSURE CHAMBERS TO SIMULATE EXOTIC ARTIFICIAL ATMOSPHERIC CONDITIONS. HUMAN ENGINEERING SYSTEMS SIMULATOR FACILITY USED TO PERFORM REAL-TIME MAN-IN-THE-LOOP EXPERIMENTS AND DATA ANALYSIS. ANECHOIC AND REVERBERATION CHAMBERS TO ENABLE EXPERIMENTAL INVESTIGATIONS OF POTENTIALLY HAZARDOUS NOISE TO DETERMINE EFFECTS ON BODY FUNCTION AND PERFORMANCE. VIVARIUM-LABORATORY RESEARCH ANIMAL FACILITY.

INSTALLATION: 6585TH TEST GROUP

HOLLOMAN AFB, N.M.

CDR.COL.JAMES S. THOMPSON

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	12.039	11.949
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	3.250	3.670
TOTAL OTHER	4.162	4.390
TOTAL ANNUAL LAB	19.451	20.009
TOTAL INHOUSE	11.715	11.923
TOTAL INHOUSE RDT&E	7.553	7.533
ANNUAL OPERATING COST	0.065	0.070

PERSONNEL	PERSONNEL DATA (FND OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	325	3	75	250
CIVILIAN	290	3	85	205
TOTAL	615	6	160	455

ACRES	SPACE AND PROPERTY			COST (MILLION \$)		
	SPACE (THOUSANDS OF SQUARE FEET)					
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
6602	336.000	7.000	148.000	491.000	10.220	38.828

...MISSION

DOD FOCAL POINT FOR TESTING AND EVALUATION OF INERTIAL GUIDANCE SYSTEMS AND COMPONENTS. OPERATES HIGH SPEED TEST TRACK FOR AERODYNAMIC, EJECTION GUIDANCE TESTING, MEASURES RADAR CROSS SECTIONS, AND ANTENNA PATTERNS OF SPACECRAFT, MISSILES, AIRCRAFT, RVS AND OTHER TARGETS.

...CURRENT IMPORTANT PROGRAMS

260IN. CENTRIFUGE IMPROVEMENT, IMP ACCY OF G LVL AND COUNTERROTATION, SLED TEST DATA ACQUISITION, IMP SLEDBORNE DATA COLLECTION, STORAGE. HYPERSONIC SLED TECH, DEVEL MONORAIL SLED FOR 25LB PAYLOAD AT 10000 FPS. ADVANCED SLED VELOCITY MEASUREMENT SYST, DEVEL ACCURATE MAGNETIC VMS. RAINFIELD UPGRADE, IMP ACCY OF FLOW RATE, DROP SIZE DISTRIBUTION.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

1-260IN, 2-100IN PRECISION CENTRIFUGES, MAX 100G WITH 300 LB PAYLOAD. PRECISION GRND, ABN TEST FCLTY. PRECISION REFERENCE, DATA COLLECTION CAPABILITIES. COMPLETE DATA, PERFORMANCE ANALYSIS CAPABILITY. ENVIRONMENTAL CHAMBERS FOR COMBINED ENVIRONMENTAL RELIABILITY TESTING. INERTIAL NAV TEST VAN. CONTINUOUS 50788 FT TEST TRACK (2-RAIL, 35588 FT, 3-RAIL 15200 FT), 5 BLOCKHOUSES, 2 INSTRMN STATIONS, SPECIALIZED SITES FOR AIRBLAST, EJECTION, IMPACT TESTING, 9000 FT TRACKSIDE, 2000 FT BALL RAINFIELD. ROCKET SLED, PROPLSN SYST INV. RADAR TARGRT SCATTER FAC TO MEAS RADAR CROSSSECTION, ANTENNA PTRNS FROM 30 MHZ TO 95 GHZ. MEASURE MONOSTATIC, BISTATIC AMP, PHASE, DOPPLER, GLINT AND JET ENGINE MODULATION OF RETURN. PRECIS MODEL BLDG FACIL FOR FULL, REDUCED SCALE MDLS OF TARGETS. IR SIGNATURE MEASUREMENT CAPABILITY.

INSTALLATION: ARMED FORCES RADIOBIOLOGY RSCH. INSTITUTE

BETHESDA, MD.

CDR. COL. DARRELL W. MCINDOE

PROGRAM	PROGRAM DATA BY FISCAL YEAR (MILLION \$)	
	1978 (ACTUAL)	1979 (ACT + EST)
TOTAL RDT&E	7.072	7.415
TOTAL PROCUREMENT	0.000	0.000
TOTAL O&M	0.000	0.000
TOTAL OTHER	1.744	1.960
TOTAL ANNUAL LAB	8.816	9.375
TOTAL INHOUSE	8.816	9.375
TOTAL INHOUSE RDT&E	7.072	7.415
ANNUAL OPERATING COST	1.669	1.794

PERSONNEL	PERSONNEL DATA (END OF FY 1978)			
	AUTHORIZED STRENGTH	TOTAL PHDS	TOTAL PROF	NON- PROF
MILITARY	89	32	58	31
CIVILIAN	129	20	42	87
TOTAL	218	52	100	118

ACRES	SPACE AND PROPERTY SPACE (THOUSANDS OF SQUARE FEET)			COST (MILLION \$)		
	LAB	ADMIN	OTHER	TOTAL	REAL PROP	EQUIP
10	47.335	21.049	56.834	120.218	7.911	4.512

...MISSION

THE MISSION OF AFRRRI SHALL BE TO CONDUCT SCIENTIFIC RESEARCH IN THE FIELD OF RADIOBIOLOGY AND RELATED MATTERS THAT ARE ESSENTIAL TO THE MEDICAL SUPPORT OF THE DEPARTMENT OF DEFENSE.

...CURRENT IMPORTANT PROGRAMS

DEFINE PHYSIOLOGICAL/PATHOLOGICAL RESPONSE IN HUMANS TO RADIATION.
ASSESS EFFECTS OF COMBINED INJURIES, MILITARY FORCES/NONCOMBATANTS.
DATA FOR PREDICTION OF COMBAT INEFFECTIVENESS AND CASUALTY PRODUCTION.
TREATMENT METHODS FOR CASUALTIES FROM RADIATION/COMBINED INJURY.
INSTRUCTION TO ARMED SERVICES ON TREATMENT OF NUCLEAR CASUALTIES.

...FUNCTIONS/EQUIPMENT/CAPABILITIES

FUNCTIONS: OPERATE FACILITIES FOR CONDUCTING RADIOBIOLOGY RESEARCH AND DISSEMINATING RESULTS. CONDUCT ADVANCED TRAINING. OPERATE FACILITIES FOR PRODUCTION OF SHORT-LIVED RADIOISOTOPES. PERFORM OTHER SUCH RESEARCH FUNCTIONS AS REQUIRED.

MAJOR EQUIPMENT INCLUDES: PULSE AND STEADY STATE NUCLEAR REACTOR, 200,000-CURIE COBALT-60 IRRADIATOR, ELECTRON LINEAR ACCELERATOR, X-RAY MACHINES WITH ASSOCIATED EXPOSURE ROOM COMPLEXES.

SUPPORT SERVICES INCLUDE: MEASUREMENT OF RADIATION FIELDS, PROVISION AND CARE OF LABORATORY ANIMALS, EQUIPMENT DESIGN AND FABRICATION ASSISTANCE, REAL-TIME DATA ACQUISITION SYSTEM, TELEVISION AND FILM DOCUMENTATION OF EXPERIMENTS, PERSONNEL AND ENVIRONMENTAL MONITORING, EDITORIAL ASSISTANCE IN REPORT PREPARATION, AND A LARGE TECHNICAL LIBRARY.

APPENDIX 1

DISESTABLISHMENT, ESTABLISHMENT OR CHANGES IN ORGANIZATION OR NAME*

DEPARTMENT OF THE ARMY

AS OF OR PRIOR TO 1 OCTOBER 1978

AIRBORNE BOARD Ft Bragg, NC	ESTABLISHED
AIRBORNE COMMUNICATIONS AND ELECTRONICS BOARD Ft Bragg, NC	DISESTABLISHED
AIR MOBILITY R&D LABORATORY Moffett Field, CA	DISESTABLISHED
AVIATION RESEARCH & TECHNOLOGY LABS Moffett Field, CA	ESTABLISHED
AVIONICS LABORATORY Ft Monmouth, NJ	DISESTABLISHED
AVIONICS R&D ACTIVITY Ft Monmouth, NJ	ESTABLISHED
COMMUNICATIONS AND ELECTRONICS BOARD Ft Gordon, GA	ESTABLISHED
COMMUNICATIONS ADP LABORATORY Ft Monmouth, NJ	DISESTABLISHED
COMMUNICATIONS R&D COMMAND Ft Monmouth, NJ	ESTABLISHED
ELECTRONICS R&D COMMAND TECHNICAL SUPPORT ACTIVITY Ft Monmouth, NJ	ESTABLISHED
HQ MED R&D CMD Ft Detrick, Frederick, MD	ESTABLISHED
HQ USAMRDC Washington, DC	DISESTABLISHED
INTELLIGENCE AND SECURITY BOARD Ft Huachuca, AZ	ESTABLISHED
MISSILE R&D COMMAND Redstone Arsenal, AL	ESTABLISHED

APPENDIX I

DISESTABLISHMENT, ESTABLISHMENT OR CHANGES IN ORGANIZATION OR NAME*

DEPARTMENT OF THE ARMY (contd)

AS OF OR PRIOR TO 1 OCTOBER 1978

MISSILE RD&E COMMAND Redstone Arsenal AL	DISESTABLISHED
NIGHT VISION & ELECTRO-OPTICS LABORATORY Ft Belvoir, VA	ESTABLISHED
NIGHT VISION LABORATORY Ft Belvoir, VA	DISESTABLISHED
R&D TECHNICAL SUPPORT ACTIVITY Ft Monmouth, NJ	DISESTABLISHED
SIGNALS WARFARE LABORATORY Vint Hill, VA	ESTABLISHED
TANK AND AUTOMOTIVE R&D COMMAND Warren, MI	DISESTABLISHED
TANK-AUTOMOTIVE R&D COMMAND Warren, MI	ESTABLISHED

DEPARTMENT OF THE NAVY

BLOOD RESEARCH LABORATORY Chelsea, MA	DISESTABLISHED
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DEPARTMENT OF THE AIR FORCE

EASTERN TEST RANGE Patrick AFB, FL	DISESTABLISHED
SPACE & MISSILE TEST CENTER (DET1) Patrick AFB, FL	ESTABLISHED. Name Change from Eastern Test Range
4950 TEST WING Wright Patterson AFB, OH	ESTABLISHED

* Changes since publication of Department of Defense In-House RDT&E Activities, 30 October 1977.

APPENDIX II

Definitions

1. **IN-HOUSE RDTE ACTIVITIES**—Those organizational entities engaged in performing work in any or all of the categories of research, development, test, and evaluation. The RDTE effort, however, should represent a minimum of 25 percent of the total effort of each entity reporting in order to be considered as an RDTE activity.

2. **PROFESSIONALS**—Full-time government scientific and engineering personnel actively engaged in RDTE activities. In the case of civilians this will include all those holding positions that fall into the following categories under the Civil Service Occupational Groups and Series of Classes, General Schedule:

101	436	665	850	1226	1382
150	437	668	855	1301	1384
180	440	680	861	1306	1386
184	454	690	871	1310	1510
190	457	695	880	1313	1515
193	460	696	881	1315	1520
401	470	801	890	1320	1529
403	471	803	892	1321	1530
405	482	804	893	1330	1540
410	487	806	894	1340	
413	601	808	896	1350	
414	602	810	1221	1360	
430	644	819	1223	1370	
434	660	830	1224	1372	
435	662	840	1225	1380	

Military professionals, both officer and enlisted, actively engaged in RDTE activities should be identified with the functions described in the above referenced civilian job series. Lawyers, accountants, chaplains, social workers, and educators should be excluded.

3. **TECHNICIANS**—Generally nonprofessionals working on an RDTE project or program in support of a professional. In the case of civilians, it will include, but will not necessarily be limited to, those holding positions that fall into the following categories of the Civil Service Occupational Groups and Series of Classes, General Schedule:

181	646	699	1371
404	647	704	1374
421	649	802	1521
455	650	817	1531
458	661	818	1541
462	667	856	
622	681	895	
625	682	1311	
636	683	1316	
645	698	1341	

Discretion will have to be exercised by each RDT&E activity in determining the number of military technicians. Generally, they should follow the guidelines established in defining civilian technicians and can be identified in DoD 1312.1-E.

4. Real Property Cost--Each reporting activity will be responsible for determining and reporting the cost of real property. This cost should be established in accordance with the guidelines and definitions in DoD Instruction 4165.14. This should also include the cost of installed equipment.

5. Equipment Cost--Each reporting activity will be responsible for determining and reporting the cost of personal property. This cost should be established in accordance with the guidelines and definitions in DoD Instruction 4165.14. This should also include the cost of installed equipment.

6. Space--The data to be furnished should include only walled and roofed building space. It should not include such things as parking lots, open storage areas, lean-tos, etc. The source of data may be the annual report submitted in compliance with the requirements of DoD Instruction 4165.14.

7. In-House Obligations--Obligations reported under this category are for activities performed, or to be performed, by the organizational entity. Their work is carried on directly by their own personnel. Particular care should be taken to include under in-house performance the cost of supplies and equipment essentially of an off-the-shelf nature that are procured for use in in-house research and development, plus such things as travel, publications, and other types of services in support of in-house functions and M.P.A. Excluded from the in-house total are expenses for planning and administering programs by DoD personnel of contracts and grants for out-of-house work and M.C.A.

8. Out-of-House Obligations--Obligations reported under this category are for activities performed, or to be performed, by other than the organizational entity. Out-of-house performers may include other departmental or DoD organizational entities, industrial firms, educational institutions, not-for-profit institutions, and private individuals. Included as out-of-house work are all expenses paid the out-of-house performers, as well as the expenses incurred in planning and administering these programs by personnel of the organizational entity. This would also include travel and other supporting services.

9. Annual Operating Cost--This should generally reflect the overhead cost of operating the laboratory or facility. It should include such things as costs of utilities, rents, janitorial services, guard and fire protection, support services such as supply personnel, printing, maintenance of buildings and grounds, etc. It should not include the salaries of direct labor personnel such as scientists, engineers, technicians, draftsmen, machinists, etc.

APPENDIX III

Selected Standard Abbreviations and Acronyms

AAM -- air-to-air missile	GCA -- ground-controlled approach
AAW -- antiair warfare	
ADPE -- automatic data-processing equipment	HF -- high-frequency
AEDC -- Arnold Engineering Development Center	IFF -- identification, friend or foe
AFMDC -- Air Force Missile Development Center	IR -- infrared
AFSC -- Air Force Systems Command	MPT -- military potential test
AFWET -- Air Force weapons effectiveness testing	NAF -- Naval Air Facility
APG -- Aberdeen Proving Ground	NASA -- National Aeronautics and Space Administration
ARPA -- Advanced Research Projects Agency	NASC -- Naval Air Systems Command
ASW -- antisubmarine warfare	NAVORD -- Naval Ordnance Systems Command
AUS -- Army United States	NAVSHIP -- Naval Ship Systems Command
	NEMP -- nuclear electromagnetic propagation
BIS -- Board of Inspection and Survey	PI -- product improvement
BW -- biological warfare	POL -- petroleum oil, lubricants
CBR -- chemical, biological radiological	QA -- quality assurance
CE -- Chief of Engineers, Army	QMDO -- qualitative materiel development objective
CG -- commanding general	QMR -- qualitative materiel requirement
CNO -- Chief of Naval Operations	RDT&E -- Research, development, test and evaluation
COMMEL -- communications electronics	RF -- radio frequency
	RV -- reentry vehicle
DA -- Department of the Army	SATS -- short airfield tactical support
DARCOM -- Department of the Army Materiel and Readiness Command	SDR -- small development requirement
DASA -- Defense Atomic Support Agency	SI -- ship installation
DoD -- Department of Defense	SP -- self-propelled
DZ -- drop zone	ST -- service test
ECM -- electronic countermeasures	T&E -- test and evaluation
ED -- engineering development	TOTO -- Tongue-of-the Ocean
EDT -- engineering development & test	UDT -- underwater demolition team
EEG -- electroencephalogram	ULMS -- Undersea Long-Range Missile System
EKG -- electrocardiogram	USATECOM -- US Army Test and Evaluation Command
ELINT -- electronic intelligence	UTTAS -- utility tactical transport aircraft system
EMP -- electromagnetic propagation	USW -- undersea warfare
EMW -- electromagnetic warfare	UV -- ultraviolet
EODC -- Explosive Ordnance Disposal Center	
ET -- engineering test	V/STOL -- vertical/short takeoff and landing
FA -- field artillery	
FBM -- fleet ballistic missile	

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KEY WORD OR ACTIVITY

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